Business Mathematics In Canada 7th Edition Jerome Test Bank

Full Download: https://alibabadownload.com/product/business-mathematics-in-canada-7th-edition-jerome-test-bank/

c1

Student:_____

1. Evaluate the following: 20 - 4 × 2 - 8

2. Evaluate the following: $18 \div 3 + 6 \times 2$

3. Evaluate the following: $(20 - 4) \times 2 - 8$

4. Evaluate the following: $18 \div (3 + 6) \times 2$

5. Evaluate the following: $20 - (4 \times 2 - 8)$

6. Evaluate the following: $(18 \div 3 + 6) \times 2$

7. Evaluate the following: 54 - 36 \div 4 + 2²

8. Evaluate the following: $(5 + 3)^2 - 3^2 \div 9 + 3$

9. Evaluate the following: $(54 - 36) \div (4 + 2)^2$

10. Evaluate the following: $5 + (3^2 - 3)^2 \div (9 + 3)$

11. Evaluate the following: $\frac{8^2 - 4^2}{(4-2)^3}$

12. Evaluate the following: $\frac{(8-4)^2}{4-2^3}$

13. Evaluate the following: $3(6 + 4)^2 - 5(17 - 20)^2$

14. Evaluate the following: $(4 \times 3 - 2)^2 \div (4 - 3 \times 2^2)$

15. Evaluate the following: $[(20 + 8 \times 5) - 7 \times (-3)] \div 9$

16. Evaluate the following: $5[19 + (5^2 - 16)^2]^2$

17. Evaluate the following correct to the cent:
$$\$100(1+0.06 \times \frac{45}{365})$$

18.

Evaluate the following correct to the cent:
$$\frac{\frac{\$200}{1+0.09\times\frac{4}{12}}}{1+0.09\times\frac{4}{12}}$$

20. Evaluate the following correct to the cent: $\$1000(1+0.02)^3$

21.

Evaluate the following correct to the cent: $\$100 \left(\frac{(1+0.04)^2 - 1}{0.04} \right)$

Evaluate the following correct to the cent: $\$300 \left[\frac{1 - \frac{1}{(1 + 0.03)^2}}{0.03} \right]$

23. If you want four-figure accuracy in your answer, what minimum number of figures must be retained in the values used in the calculations?

24. For a final result of approximately \$7000 to be accurate to the cent, what minimum number of figures must be maintained in the values used in the calculations?

25. If a final result of the order of five million dollars is to be accurate to the nearest dollar, what minimum number of figures must be maintained in the calculations?

26. If an interest rate (which could be greater than 10%) is to be calculated to the nearest 0.01%, what minimum number of digits must be retained in the numbers used to calculate the interest rate?

27. Give three examples of values which have only two or three digits but nevertheless are known with perfect accuracy.

28. If a time period of approximately five years is to be calculated to the nearest month, what minimum number of figures must be retained in the numbers used in the calculations?

29. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{7}{8}$

30. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{65}{104}$

31. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent

equivalent forms to five-figure accuracy: $\frac{47}{20}$

32. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $-\frac{9}{16}$

33. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{-35}{25}$

34. The following mixed number has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $1\frac{7}{25}$

35. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{25}{1000}$

36. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{1000}{25}$

37. The following mixed number has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $2\frac{2}{100}$

38. The following mixed number has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $-1\frac{11}{32}$

39. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{37.5}{50}$

40. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent

22.5

equivalent forms to five-figure accuracy: $\overline{}$

41. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $\frac{5}{6}$

- 42. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal 8 3
 - places needed to display the repeating digit or group of digits.

43. The following mixed number has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $7\frac{7}{9}$

44. The following mixed number has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $1\frac{1}{11}$

45. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal 10

places needed to display the repeating digit or group of digits. $\overline{9}$

46. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $\frac{-4}{900}$

47. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $-\frac{7}{270}$

48. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $\frac{37}{27}$

49. Round the following to four-figure accuracy: 11.3845

50. Round the following to four-figure accuracy: 9.6455

51. Round the following to four-figure accuracy: 0.5545454

52. Round the following to four-figure accuracy: 1000.49

53. Round the following to four-figure accuracy: 1.0023456

54. Round the following to four-figure accuracy: 0.030405

55. Round the following to four-figure accuracy: 40.09515

56. Round the following to four-figure accuracy: 0.0090909

57. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to

five figures: $\frac{1}{6}$

58. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to five figures: $\frac{7}{6}$

- 59. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to
 - five figures: $\frac{1}{60}$

60. Convert the following mixed number to its decimal equivalent and percent equivalent values, rounded to five figures: $2\frac{5}{9}$

61. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to

five figures: $\frac{250}{365}$

62. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to five figures: $\frac{15}{365}$

63. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to

five figures: $\frac{0.11}{12}$

64. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to

five figures: $\frac{0.095}{12}$

65. Evaluate the following accurate to the nearest cent:

 $92\left(1+0.095 \times \frac{112}{365}\right)$

66.

$$100\left(1+0.11\times\frac{5}{12}\right)$$

Evaluate the following accurate to the nearest cent:

67. Evaluate the following accurate to the nearest cent: $\frac{454.76 \left(1-0.105 \times \frac{11}{12}\right)}{12}$

68. Evaluate the following accurate to the nearest cent: $\frac{\$790.84}{1+0.13\times\frac{311}{365}}$

60	\$3490
Evaluate the following accurate to the nearest	cent: $1 + 0.125 \times \frac{91}{365}$

70. Evaluate the following accurate to the nearest cent: $\frac{\$10,000}{1-0.10\times\frac{182}{365}}$

71.

Evaluate the following accurate to the nearest cent:

 $650\left(1+\frac{0.105}{2}\right)^2$

72.

 $\$950.75 \left(1 - \frac{0.095}{4}\right)^2$

Evaluate the following accurate to the nearest cent:

73.

Evaluate the following accurate to the nearest cent:

 $\frac{\$15,400}{\left(1+\frac{0.13}{12}\right)^{\!6}}$

74. Evaluate the following accurate to the nearest cent:

 $\frac{\$550}{\left(1+\frac{0.115}{2}\right)^{\!\!4}}$

the nearest cent: $\frac{\frac{6600(1+0.085 \times \frac{153}{365})}{1+0.125 \times \frac{82}{365}}}{1+0.125 \times \frac{82}{365}}$

Evaluate the following accurate to the nearest cent:

76.

 $\frac{\$780 \Bigl(1+\frac{0.0825}{2}\Bigr)^5}{\Bigl(1+\frac{0.10}{12}\Bigr)^8}$

77.

Evaluate the following accurate to the nearest cent:

Evaluate the following accurate to the nearest cent:

$$\$1000 \left[\frac{\left(1 + \frac{0.09}{12}\right)^7 - 1}{\frac{0.09}{12}} \right]$$

78.

Evaluate the following accurate to the nearest cent:

 $\frac{\frac{\$350}{\frac{0.0975}{12}} \left[1 - \frac{1}{\left(1 + \frac{0.0975}{12}\right)^5} \right]$

79.

	\$9500	
1+	$\frac{0.075}{4}^{5}$ -	-1
	0.075	

(

Evaluate the following accurate to the nearest cent:

80.

 $\$45 \frac{\left[1 - \frac{1}{\left(1 + \frac{0.0837}{2}\right)^4}\right]}{\frac{0.0837}{2}} + \frac{\$1000}{\left(1 + \frac{0.0837}{2}\right)^4}$

Evaluate the following accurate to the nearest cent:

81. What is the percent *Rate* if a quantity is four times the size of the *Base*?

82. What is the percent *Rate* if a quantity is $\frac{1}{1000}$ of the *Base*?

83. If the percent Rate is 1000%, what multiple is the Portion of the Base?

84. If the percent *Rate* is 0.01%, what fraction is the *Portion* of the *Base*?

85. Calculate 1.75% of \$350 accurate to the cent.

86. Calculate 6.6^{-0} % of \$666.66 accurate to the cent.

87. What percent is \$1.50 of \$11.50? Calculate to three-figure accuracy.

88. What percent is 88' of \$44? Calculate to three-figure accuracy.

89. \$45 is 60% of what amount accurate to the cent?

90. \$69 is 30% of what amount accurate to the cent?

91. What amount is 233.3% of \$75 accurate to the cent?

92. What amount is 0.075% of \$1650 accurate to the cent?

93. \$134 is what percent of \$67? Calculate to three-figure accuracy.

94. \$1.34 is what percent of \$655? Calculate to three-figure accuracy.

95. 150% of \$60 is what amount accurate to the cent?

96. $0.58\overline{3}\%$ of \$1500 is what amount accurate to the cent?

97. 71/2% of what amount is \$1.46 accurate to the cent?

98. 1234% of what amount is \$27.50 accurate to the cent?

99. What percent of \$950 is \$590? Calculate to three-figure accuracy.

100.What percent of \$590 is \$950? Calculate to three-figure accuracy.

101.95% of what amount is \$100 accurate to the cent?

102.81/3% of what amount is \$10 accurate to the cent?

103.30 m is what percent of 3 km? Calculate to three-figure accuracy.

104.500 grams is what percent of 2.8 kilograms? Calculate to three-figure accuracy.
105.How much is $\frac{1}{2}$ % of \$10 accurate to the cent?

106.0.75% of \$100 is what amount accurate to the cent?

107.\$180 is 120% of what amount accurate to the cent?

108.\$559.35 is 113% of what amount? Calculate to three-figure accuracy.

109.1301/2% of \$455 is what amount accurate to the cent?

110.0.0505% of \$50,000 is what amount? Calculate to three-figure accuracy.

111.\$281.25 is 225% of what amount accurate to the cent?

112.350% of what amount is \$1000 accurate to the cent?

113.\$10 is 0.5% of what amount accurate to the cent?

115.Cecilia and Nathan estimate their total cost for a vacation in Australia to be \$14,775.

a) What percentage is this cost of their combined gross monthly income of \$8775?

b) If 72% of their gross monthly income is already consumed by rent, taxes, car payments, and other regular living expenses, what percentage is the trip's cost of their remaining annual disposable income?

116.In a one-month period, a convenience store had sales of \$65,560 from its gas pumps and sales of \$36,740 from other in-store products. What percent of total sales were from gasoline?

117.In a basketball game, the Langara College Falcons scored $54.\overline{54}$ % of 33 shots from the 2-point zone, $46.\overline{6}$ % of 15 attempts from the 3-point distance, and 79.3% of 29 foul shots (1 point each). How many points did the Falcons score?

118.A provincial Minister of Education recently announced that his government's forecast expenditure of \$2.68 billion on education next year represents 23.5% of the provincial budget. Rounded to the nearest million dollars, what is the province's total budget for the next year?

119.Unusually high snowfall during the past winter resulted in Brockton's costs for snow plowing and removal to reach \$320,200. This represents 127% of its budgeted cost. Rounded to the nearest \$100, what amount did Brockton budget for snow clearance?

120.The royalty rate performing artists receive from songs downloaded from Apple iTunes is 5.7%. If a band received royalties from Apple of \$99,736.41 for a year, how many song downloads at \$0.99 each did the band have for that year?

121.Your regular workweek is 7.5 hours per day for five days. If you do not work on seven public holidays and you receive two weeks vacation, what percentage of the total hours in a year are you actually at work? Assume that a year has exactly 52 weeks.

122. The Royal Canadian Mint sells one troy ounce (31.16 grams) platinum collector coins of 99.95% purity. How many milligrams of impurities are in a single coin?

123. Ivory hand-soap is advertised as being $99\frac{44}{100}$ pure. (It floats!) How many milligrams of impurities are in a 150-gram bar of Ivory soap?

124.An online discount broker charges a transaction fee of \$30 plus an additional 3 cents per share. A full-service broker charges a commission rate of 2.4% of the total dollar value of a stock transaction. Suppose you purchase 200 shares of the Bank of Nova Scotia at \$55.40 per share. What percentage are the total fees charged by the online discount broker of the commission you would pay the full-service broker? 125.A full-service broker charges a commission rate of 2.2% of the total dollar value of a stock transaction. A discount broker charges a transaction fee of \$25 plus an additional five cents per share. Suppose you purchase 800 shares of Talisman Energy at \$21.75 per share. What percentage of the commission fee charged by the full-service broker would you save by using the discount broker?

- 126.A province's progressive income tax rates are structured as follows: 16% tax on the first \$15,000 of taxable income, 26% on the next \$20,000, 35% on the next \$40,000, and 45% on any additional taxable income. What percentage is an individual's total income tax of his (taxable) income if his taxable income for a year is:
 - a) \$33,000?
 - b) \$66,000?
 - c) \$99,000?

127.In 2009, Canada's population was 33,700,000 and Japan's population was 127,600,000. Canada's land area is 9,093,500 square kilometres but Japan's area is only 377,835 square kilometres. To the nearest 0.01%, what percentage was Canada's population density (people per square kilometre) of Japan's population density in 2009?

128.A property sold for 250% of what the vendors originally paid for it. What was that original price if the recent selling price was \$210,000?

129. The Calgary Flames hockey team announced that its season's ticket sales of 11,542 represents 67.50% of the Pengrowth Saddledome's seating capacity. Rounded to the nearest 100, how many seats were not sold to season's ticket holders?

130. The maximum amount an individual can contribute to her Registered Retirement Savings Plan (RRSP) for a year is set from time to time by the Regulations of the Income Tax Act. For the year 2010, the maximum contribution was the lesser of \$22,000 or 18% of the individual's "earned income" during 2009. What was the lowest amount of earned income for 2009 at which an individual could make a \$22,000 contribution in 2010? (Round to the nearest dollar.)

131.Stan is a real estate salesperson. He receives 60% of the 4.8% commission that the real estate agency charges on sales. If his income for the past year was \$150,480, what was his dollar volume of sales for the year?

132.A stockbroker is paid 45% of the commission her firm charges her clients. If she personally received \$134.55 on a \$11,500 transaction, what is the firm's commission rate?

133.A mortality rate indicates the fraction of individuals in a population who are expected to die in the next year.

a. If the mortality rate among 35-year-old males is 0.34%, what is the expected number of deaths per year among a province's total of 50,000 such males?b. If 35-year-old males constitute 0.83% of the overall population in a city of 1.45 million, how many deaths of such males are expected in that city in a year?

134.Aletta's annual salary of \$58,800 is paid weekly. She is paid at time and a half for any overtime beyond her regular workweek of 35 hours. What is her gross pay for a week in which she works 39 hours?

135.Lucille receives an annual salary of \$37,500 based on a 37.5-hour workweek. What are her gross earnings for a two-week pay period in which she works 9 hours of overtime at 1½ times her regular rate of pay?

136.Hasad is paid an annual salary of \$54,600 based on a 40-hour workweek. What is his gross pay for a biweekly pay period if he works 43 hours in the first week and 46.5 hours in the second week? Overtime is paid at time and a half. 137.Ross's compensation is to be changed from an hourly rate of \$31.50 for a 40-hour week to a salary paid semimonthly. What should he be paid semimonthly in order for his annual earnings to remain the same?

138.Allison's regular hourly rate of pay is \$17.70. She is paid time and a half for all work on weekends and for any time over 7.5 hours on weekdays. Calculate her gross earnings for a week in which she works 4.5, 0, 7.5, 8.5, 6, 6, and 9 hours on Saturday to Friday, respectively. 139.Sam is paid \$34.50 per hour as a power plant engineer. He is paid 1½ times the regular rate for all time exceeding 8 hours in a day or 40 hours in a week. Statutory holidays worked are paid at double time (in addition to holiday pay). What were his gross earnings for a week in which he clocked 8, 9.5, 8, 8, 10, 0, and 8 hours on Saturday to Friday, respectively, where Monday was a statutory holiday?

140.Mary sews for a clothing manufacturer. She is paid \$7.50 per hour plus a piece rate that depends on the type of garment in production. The current production run is men's shirts, for which she is paid \$3.00 for each unit exceeding her quota of 20 shirts in an 8-hour shift. What will be her total pay for a regular workweek in which her output on successive days was 24, 26, 27, 28, and 30 shirts? 141.Herb packs fish in 500-g cans on a processing line. He is paid \$8.25 per hour plus \$0.18 per kilogram for production in excess of 500 kg in a 7.5-hour shift. How much will he earn per day if he packs 250 cans per hour?

142.Svetlana is an independent insurance broker placing various clients with any of several insurance companies. On homeowner insurance policies, each month she receives: \$20 for each renewal of an existing policy; \$35 for each policy placed with a new client; and 5.5% of the annual premiums on all policies (new and renewed) written in the month. In October, she placed 37 new-client policies representing \$14,375 in annual premiums and 126 policy renewals representing \$47,880 in annual premiums. What amount did Svetlana earn in October?

143.Hillary sells cosmetics from her part-time home-based business. She receives a straight commission of 21% from her supplier. At the year-end, she also receives a 7% bonus on sales exceeding her annual quota of \$100,000. What will her gross annual earnings be for a year in which her average monthly sales are \$11,000?

- 144.Manfred is considering job offers of the same type of sales position from two retailers with similar product lines:
 - Supreme Audio & Video is offering a base salary of \$2000 per month plus a 4% commission rate on sales;
 - Buy-Right Electronics will pay a base salary of \$1500 per month plus commission rates of 3% on the first \$25,000 of sales and 6% on additional sales in a month.

Based on past experience in similar sales positions, Manfred is confident he can attain average monthly sales of \$55,000. At this level of sales, what would be his average gross earnings per month from each retailer?

145.A shoe salesman is paid the greater of \$600 per week or 11% of sales. a) What will be his earnings for a week in which sales are \$5636? b) At what volume of sales per week will he start to earn more from the commission based compensation?

146.Tom sells mutual funds on a graduated commission structure. He receives 3.3% on the first \$50,000 of sales in a month, 4.4% on the next \$50,000, and 5.5% on all further sales. What are his gross earnings for a month in which he sells \$140,000 worth of mutual funds?

147.Sharon is a manufacturer's representative selling office furniture directly to businesses. She receives a monthly salary of \$2000 plus a 2.2% commission on sales exceeding her quota of \$150,000 per month.

a) What are her earnings for a month in which she has \$227,000 in sales?

b) If her average monthly sales are \$235,000, what straight commission rate would generate the same average monthly earnings as her current basis of remuneration?

148.Julio is paid on a graduated commission scale of 5% on the first \$20,000 of sales in a month, 7.5% on the next \$20,000, and 10% on all additional sales.

- a) What will he be paid for a month in which his sales are \$54,880?
- b) What single commission rate on all sales would result in the same earnings for the month?

149.Karen works in a retail computer store. She receives a weekly base salary of \$300 plus a commission of 3% of sales exceeding her quota of \$20,000 per week. What were her sales for a week in which she earned \$630.38?

150.Jason's gross pay for August was \$3296.97 on sales totalling \$151,342. If his base salary is \$1500 per month, what is his rate of commission on sales exceeding his monthly quota of \$100,000?

151.Daniella's gross monthly earnings are based on commission rates of 4% of the first \$40,000 of sales, 5% of the next \$50,000, and 6% of all additional sales for the month. What was her sales total for a month in which she was paid \$5350?

152.Trevor earns a base monthly salary of \$2000 plus a commission of 3% on sales exceeding his monthly quota of \$25,000. He receives a further 3% bonus on sales in excess of \$50,000. What must his sales be in order to gross \$4000 per month?

153.In what circumstance should you calculate a weighted average instead of a simple average?

154.In what circumstances will the weighted average be equal to the simple average?

155. How must you allocate your money among a number of investments so that your portfolio's overall rate of return will be the same as the simple average of the rates of return on individual investments?

156.Suppose that, one year ago, you invested \$20,000 in *mutual* fund A and \$10,000 in mutual fundB. Which fund had the higher rate of return in the past year if the weighted average of the two rates of return exceeds the simple average? Present your reasoning.

157.A survey of 254 randomly chosen residences in a city revealed that 4 had four television sets, 22 had three sets, 83 had two sets, 140 had one set, and 5 had no TV set at all. Based on the survey, what would you estimate to be the average number of TV sets per household?

158.An investor accumulated 1800 shares of Corel Corporation over a period of several months. She bought 1000 shares at \$15.63, 500 shares at \$19.00, and 300 shares at \$21.75. What was her average cost per share? (*Note*: Investors who purchase shares in the same company at more than one price must eventually do this calculation. Tax rules require that the capital gain or loss on the sale of any of the shares be calculated using the weighted-average price paid for all of the shares rather than the particular price paid for the shares actually sold.)

159.A hockey goalie's "goals against average" (GAA) is the average number of goals scored against him per (complete) game. In his first 20 games in goal, O. U. Sieve had one shutout, two 1-goal games, three 2-goal games, four 3-goal games, seven 4-goal games, two 6-goal games, and one 10-goal disaster. Calculate his GAA. 160.Serge's graduated commission scale pays him 3% on his first \$30,000 in sales, 4% on the next \$20,000, and 6% on all additional sales in a month. What will be his average commission rate on sales for a month totalling a) \$60,000, b) \$100,000?

161. The RBC Royal Bank offers an "add-on option" on fixed-rate mortgages. The option allows the customer to borrow additional funds partway through the term of the mortgage. The interest rate charged on the combined mortgage debt becomes the weighted average of the old rate on the former balance and the current competitive rate on new mortgage financing. Suppose Herschel and Julie had a mortgage balance of \$37,500 at 8%, when they borrowed another \$20,000 at 7%. What interest rate will they be charged by the RBC Royal Bank on the new consolidated balance?

162.Margot's grades and course credits in her first semester at college are listed below.

Grade	C+	B-	B+	С-	В	С
Credits	5	3	4	2	3	4

Using the table in Example 1.5D for converting Letter Grades to grade Point Value, calculate Margot's grade point average for the semester.

163. The distribution of scores obtained by 30 students on a quiz marked out of 10 is listed below.

Score	10	9	8	7	6	5	4	3	2	1
Number of Students	2	6	9	7	3	2	0	1	0	0

What was the average score on the test?

164.Alihan's transcript shows the following academic record for four semesters of part-time college studies. Calculate his cumulative GPA at the end of his fourth semester.

Semester	Credits	GPA
Ι	6	3.5
II	9	3.0
III	12	2.75
IV	7.5	3.2

165.The "age" of an account receivable is the length of time that it has been outstanding. At the end of October, a firm has \$12,570 in receivables that are 30 days "old," \$6,850 that are 60 days "old," and \$1325 that are 90 days "old." What is the average "age" of its accounts receivable at the end of October?

166.One year ago, Sook-Yin allocated the funds in her portfolio among five securities in the proportions listed below. The rate of (total) return on each security for the year is given in the third column of the table.

	Portion	Rate of Return
Security	invested	for the year
Company A Shares	15%	14%
Province A Bonds	20	10
Company C Shares	10	-13
Units in Fund D	35	12
Company E Shares	20	27

Calculate the rate of return for the entire portfolio.

167.One of the methods permitted by Generally Accepted Accounting Principles for reporting the value of a firm's inventory is *weighted-average inventory pricing*. The Boswell Corporation began its fiscal year with an inventory of 156 units valued at \$10.55 per unit. During the year it made the purchases listed in the following table.

Date	Units Purchased	Unit Cost
February 10	300	\$10.86
June 3	1,000	10.47
August 23	500	10.97

At the end of the year, 239 units remained in inventory. Determine: a) The weighted-average cost of the units purchased during the year. b) The weighted-average cost of the beginning inventory and all units purchased during the year. c) The value of the ending inventory based on the weighted-average cost calculated in b.

168.Suppose a group of consumers spends 30% of its disposable income on food, 20% on clothing, and 50% on rent. If over the course of a year the price of food rose 10%, the price of clothing dropped 5%, and rent rose 15%, what was the average price increase experienced by these consumers?

169.A restaurant owner set her menu prices at a predetermined percentage of her input costs for food, ingredients, and beverages. The prices as a percentage of these costs for various menu categories are presented in the second column of the table. The third column presents the

Menu category	Menu price as a percentage of costs	Percentage of sales revenue
Appetizers	300%	10%
Entrees	200%	50%
Desserts	225%	25%
Beverages	250%	15%

breakdown of the restaurant's overall revenue from the four men categories. On average, what are menu prices as a percentage of the basic input costs? Overall, what are the input costs as a percentage of revenue? 170.The balance on Nucorp's revolving loan began the month at \$35,000. On the eighth of the month another \$10,000 was borrowed. Nucorp was able to repay \$20,000 on the 25th of the 31-day month. What was the average balance on the loan during the month? (Use each day's closing balance as the loan balance for the day.)

171.A seasonal manufacturing operation began the calendar year with 14 employees. During the year, employees were taken on or laid off on various dates as presented in the table below.

Date	Employee changes
April 1	7 hired
May 1	8 hired
June 1	11 hired
Sept. 1	6 laid off
Oct. 1	14 laid off

What was the average number of employees on the payroll during the calendar year? (Assume that each month has the same length.)

172.Marcel must temporarily invest extra money in his retail business every fall to purchase additional inventory for the Christmas season. On September 1 he already had a total of \$57,000 invested in his business. Subsequently, he invested or withdrew cash on various dates as shown in the following table.

Date	Additional injection or withdrawal
Oct. 1	\$15,000 injection
Nov. 1	\$27,000 injection
Feb. 1	\$23,000 withdrawal
March 1	\$13,000 withdrawal
May 1	\$6000 withdrawal

What was the average cumulative investment in the business during the period from September 1 to August 31? (Assume that each month has the same length.)

173.When a company calculates its earnings per common share for its financial statements, it uses the weighted-average number of common shares outstanding during the year. Enertec Corp. began its fiscal year (January 1 to December 31) with 5 million common shares outstanding. Additional common shares were issued during the year as indicated in the following table.

Date	Event	Additional shares issued
March 1	New public offering	1,000,000
June 1	Employees and officers exercise stock options	500,000
Nov. 1	Convertible bonds exchanged for shares	750,000

What was average number of common shares outstanding during the year? (Assume that each month has the same length.)

174.Lien, the proprietor of a grocery store, prepares her Deluxe Nut Combo by mixing various ingredients she buys in bulk. The second column of the following table presents the amount of each ingredient Lien uses in making a batch of the Combo mix. In order to set the retail price of the Deluxe Nut Combo at 150% of her cost, Lien must determine her cost based on the average wholesale cost of the ingredients given in the third column.

Ingredient	Amount	Cost per kg
Peanuts	5 kg	\$2.95
Cashews	2 kg	\$9.50
Almonds	1 kg	\$11.50
Sunflower seeds	500 g	\$2.75
Raisins	400 g	\$3.60
Smarties	300 g	\$6.40

- a. What is Lien's average cost per 100 g of her Deluxe Nut Combo?
- b. What is her retail price per 100 g?

175.Johnston Distributing, Inc. files quarterly GST returns. The purchases on which it paid the GST and the sales on which it collected the GST for the last four quarters were as follows:

Quarter	Purchases	Sales
1	\$596,476	\$751,841
2	967,679	627,374
3	823,268	1,231,916
4	829,804	994,622

Calculate the GST remittance or refund due for each quarter.

176.Sawchuk's Home and Garden Centre files monthly GST returns. The purchases on which it paid

the GST and the sales on which it collected the GST for the last four months were as follows:

Month	Purchases	Sales	
March	\$135,650	\$57,890	
April	213,425	205,170	
May	176,730	313,245	
June	153,715	268,590	

Calculate the GST remittance or refund due for each month.

177.Calculate the total amount, including both GST and PST, that an individual will pay for a car sold for \$39,500 in: a) Alberta b) Ontario c) Quebec.

178.How much more will a consumer pay for an item listed at \$1000 (pretax) in Prince Edward Island than in Manitoba?

179.a) What percentage is the HST of an HST-inclusive price in New Brunswick?

b) The total price including HST of an item is \$171.35. What is the amount of HST included in the price?

180.To attract shoppers, retailers occasionally advertise something like "Pay no GST or PST!" Needless to say, neither the federal nor the provincial government is willing to forego its sales tax. In this situation, the retailer must calculate and remit the GST and PST as though the "ticket" price already includes these sales taxes. How much GST and PST must a Manitoba retailer report on a \$495 item that he sells on a Pay-No-GST-or- PST basis? (Hint: What percentage is the GST of a GST- and PST-inclusive price?)

181. What are the taxes on a property assessed at \$227,000 if the mill rate is 16.8629?

182.a) Express a property tax increase of 0.1 mill in terms of dollars per \$100 of assessed value?

b) If the mill rate increases by 0.1 mill, what is the dollar increase in property taxes on a \$200,000 home?

183. The assessment on a farm consists of \$143,000 for the house and \$467,000 for the land and buildings. A mill rate of 15.0294 applies to residences, and a rate of 4.6423 applies to agricultural land and buildings. What are the total property taxes payable on the farm?
184. The assessed value on a property increased from \$285,000 last year to \$298,000 in the current year. Last year's property tax rate was \$1.56324 per \$100 of assessed value. a) What will be the change in the property tax from last year if the new tax rate is set at \$1.52193 per \$100? b) What would the new tax rate have to be for the dollar amount of the property taxes to be unchanged?

185. The school board in a municipality will require an extra \$2,430,000 for its operating budget next year. The current mill rate for the school tax component of property taxes is 7.1253. a) If the total of the assessed values of properties in the municipality remains at the current figure of \$6.78 billion, at what value must next year's school mill rate be set? b) If the total of all assessed values rises by 5% over this year's aggregate assessment, at what value must next year's school mill rate be set?

186. The total assessed value of property in Brockton has risen by \$97 million from last year's figure of \$1.563 billion. The property tax rate last year for city services was \$0.94181 per \$100 of assessed value. If the city's budget has increased by \$750,000, what tax rate should it set for the current year?

187.a. Evaluate the following: $(2^3 - 3)^2 - 20 \div (2 + 2^3)$

188. b. Evaluate the following: $\left[4\left(2\times3^2-2^3\right)^2 \div (10-4\times5)\right]$

189. c. Evaluate the following: $\$213.85 \left(1-0.095 \times \frac{5}{12}\right)$

190.

d. Evaluate the following: $\frac{2315}{1+0.0825 \times \frac{77}{365}}$

191. e. Evaluate the following: $\frac{325.75 \left(1 + \frac{0.105}{4}\right)^2}{4}$

192.	\$710
f. Evaluate the following:	$\left(1 + \frac{0.0925}{2}\right)^3$

193.
g. Evaluate the following:
$$\$885.75(1+0.0775 \times \frac{231}{365}) - \frac{\$476.50}{1+0.0775 \times \frac{49}{365}}$$

194. $\$859 \left(1 + \frac{0.0825}{12}\right)^3 + \frac{\$682}{\left(1 + \frac{0.0825}{12}\right)^2}$

195. a. Evaluate the following: $96 - (6 - 4^2) \times 7 - 2$

196.b. Evaluate the following: $81 \div (5^2 - 16) - 4(2^3 - 13)$



198. $\$550.45 \left(1+0.0875 \times \frac{195}{365}\right) - \frac{\$376.29}{1+0.0875 \times \frac{99}{365}}$ d. Evaluate the following:

199.

e. Evaluate the following: $\$1137 \left(1 + \frac{0.0975}{12}\right)^2 + \frac{\$2643}{\left(1 + \frac{0.0975}{12}\right)^3}$

200.What percent of \$6.39 is \$16.39?

201.80% of what amount is \$100?

202.¾% of what amount is \$1.00?

203.Fifteen minutes is what percentage of 2 hours?

204.The actual profit of \$23,400 for the most recent fiscal quarter was 90% of the forecast profit. What was the forecast profit?

205.Renalda sold Westel stock that she purchased at \$2.20 per share one year ago for a 35% gain. At what price did she sell the stock?

206.Luther is paid an annual salary of \$56,600 based on a 37½-hour workweek.

- a) What is his equivalent hourly wage? (Assume that a year has exactly 52 weeks).
- b) What would be his total remuneration for a bi-weekly pay period of that year if he worked 4.5 hours of overtime at time and a half?

207.Istvan earns an annual salary of \$61,000 as an executive with a provincial utility. He is paid biweekly. During a strike, he worked 33 hours more than the regular 75 hours for a two-week pay period. What was his gross pay for that period if the company agreed to pay 1.5 times his equivalent hourly rate for overtime? (Assume that a year has exactly 52 weeks.)

208.Sonja is paid \$42.50 per hour as a veterinarian. She is paid 1½ times the regular rate for all time exceeding 7½ hours in a day or 37½ hours per week. Work on a statutory holiday is paid at double time. What were her gross earnings for a week in which she worked 6, 0, 3, 7½, 9, 7½, and 8 hours on Saturday to Friday, respectively, and the Monday was a statutory holiday?

209.Marion receives a monthly base salary of \$1000. On the first \$10,000 of sales above her monthly quota of \$20,000, she is paid a commission of 8%. On any additional sales, the commission rate is 10%. What were her gross earnings for the month of August, in which she had sales amounting to \$38,670?

210.Lauren's gross pay for July was \$3188.35 on net sales totalling \$88,630. If her base salary is \$1000 per month, what is her rate of commission on sales exceeding her monthly quota of \$40,000?

211.Havel signed a listing agreement with a realtor. The commission rate is 4% on the first \$200,000 of the selling price, and 2.5% on the remainder. a) What commission will Havel pay if he sells his home for \$289,000? b) What is the average commission rate on the selling price?

212.Through a calculation (on Canadian Individual Tax Returns) known as the "Old Age Security clawback," an individual receiving Old Age Security (OAS) benefits must repay an increasing proportion of these benefits to the federal government as the individual's net income rises beyond a certain threshold. If the OAS clawback is 15% of net income exceeding \$68,000, at what amount of net income must a taxpayer repay all \$6300 of OAS benefits received in the year?

213.Ms. Yong invested a total of \$73,400 in three mutual funds as shown in the table below. The third column shows the change in value of each fund during the subsequent six months.

Mutual fund	Amount Invested (\$)	Change in value (%)
Canadian equity fund	16,800	-4.3
US equity fund	25,600	-1.1
Global equity fund	31,000	8.2

What was the percent change in value of Ms. Yong's overall mutual fund portfolio during the six-month holding period?

214.One year ago Helga allocated the funds in her portfolio among five securities in the amounts listed in the following table. The rate of return on each security for the year is given in the third column of the table.

	Amount	Rate of return
Security	Invested	for the year
Company U shares	\$5000	30%
Province V bonds	20,000	-3
Company W shares	8000	-15
Units in Fund X	25,000	13
Company Y shares	4500	45

Calculate the rate of return for the entire portfolio.

215.Anthony began the year with \$96,400 already invested in his Snow 'n Ice retail store. He withdrew \$14,200 on March 1 and another \$21,800 on April 1. On August 1, he invested \$23,700, and on November 1 he contributed another \$19,300. What was his average cumulative investment during the year? (Assume that each month has the same length.)

216. The fiscal year for Pine Valley Skiing Ltd., the owner of a downhill skiing facility, ends on June

30. The company began the recently completed fiscal year with its summer maintenance crew of 7. The following table presents the sequence of employee hirings and layoffs during the fiscal year.

Date	Employee changes
Sept. 1	6 hired
Nov. 1	18 hired
Dec. 1	23 hired
Mar. 1	11 laid off
Apr. 1	20 laid off
May 1	16 laid off

What was the average number of employees working for Pine Valley during the fiscal year? (Assume that each month has the same length.)

217. Evaluate the answer correct to the cent: $\$250\left(1+0.05\times\frac{145}{365}\right)$

218.

\$2500	
$1 + 0.06 \times \frac{8}{12}$	

Evaluate the answer correct to the cent:

219. Evaluate the answer correct to the cent: $\frac{\$5000}{(1+0.04)^2}$

220.Evaluate the answer correct to the cent: $\$700(1+0.05)^3$

221.

\$1100	$((1+0.05)^2-1)$
\$1100	0.05

Evaluate the answer correct to the cent:

222. Evaluate the answer correct to the cent: $\$3000 \left(1+0.04 \times \frac{285}{365}\right)$

223. Evaluate the answer correct to the cent: $\frac{\$750}{1+0.04\times\frac{5}{12}}$

224	\$100
Evaluate the answer correct to the cent:	$1 + .025 \times \frac{13}{12}$
Evaluate the answer correct to the cent.	12

225. Evaluate the answer correct to the cent: $\frac{\$1000}{(1+0.05)^2}$

226.Evaluate the answer correct to the cent: $1700(1+0.04)^3$

227.

	$((1+0.045)^2 - 1)^2$	
Evaluate the answer correct to the cent:	0.045	

228. $30 \div 3 + 12 \div 4$

229. $30 \div (3+12) \div 2$

230. $12 + 3\left[2 + (4^2 - 13)^2\right]^2$

231. $5 - (2 - 4)^2 + 2^3 - 4^2$

^{232.}Convert the following to its decimal and percent equivalents. $2\frac{2}{5}$

 $^{\mbox{233.}}\mbox{Convert}$ the following to its decimal and percent equivalents. 4

234.
$$\$500 \left[\frac{(1+0.04)^6 - 1}{0.04} \right]$$





236.Calculate 0.54% of \$200.

237.\$75 is 20% of what amount?

238.Syed's net pay is 81% of his gross pay. His net pay for two weeks is \$1069.20. What is his gross pay for two weeks?

240.Hany earns \$17.00 per hour for a forty-hour week. His overtime rate is 1 ½ times any hours exceeding forty in a week. What will Sam's gross earnings be for a week if he works 42.5 hours?

241.Surinder works in a retail store in Square One in Mississauga. She earns a base salary of \$320 per week, and a commission of 3% on sales over her quota of \$5000. How much will Larissa earn if her sales for the week are: a) \$4500? b) \$8500?

242.Kristina is a sales representative for a pharmaceutical company. She is paid the greater of \$3500 per month or 5% of sales. a) What are her earnings for the month if her sales are \$60,000? \$78,000? b) At what volume of sales per month will she start to earn more from the commission-based compensation?

243.Safa's gross pay last month was \$3300.00. Her base salary is \$3000 per month, plus a commission of 2% on sales over \$60,000. What were Safa's sales for last month?

244.Cliff is a sales manager for a convention centre. He is paid on a graduated commission scale of 0.5% on the first \$200,000, 0.7% on the next \$300,000, and 0.8% on all additional sales for the month. What are Cliff's gross earnings in a month in which he sells: a) \$400,000? b) \$700,000?

245.Fatima took six courses last semester. Her grades and course credits are as follows:

Course	Grade	Credits
Accounting	\mathbf{B}^+	3
Business Mathematics	А	4
Human Resources	В	3
Economics	C+	3
Computer Applications	А	2
Marketing	В	3

Using the Letter Grade to Grade Point Value conversion table in Example 1.5B, calculate her grade point average for the semester.

246. The following grades are from the first business mathematics test in the semester. What is the

class average?

Grade	Number of Students
100	2
97	3
95	4
91	1
88	2
87	2
85	3
80	5
78	3
77	2
75	4
65	2
60	3
58	4
41	1
40	1

247.Mrs. Sandhu invested \$10,000 at 5%, \$15,000 at 4%, and \$20,000 at 3%. Calculate Mrs. Sandhu's overall rate of return.

248.Akini is paid on a graduated commission scale of 1% on his first \$200,000 in sales, 2% on the next \$300,000, and 4% on all additional sales in a month. What is Akini's average commission rate on monthly sales totalling \$600,000?

249.Jenna bought a car for \$42,050.90, which included 8% PST and 7% GST. What was the selling price of the car?

250.M Studios files GST returns quarterly. In the last quarter, M Studios sold picture frames totalling \$3,750, photographic equipment for \$78,225, and billed \$43,580 for studio work. In the same time period, M Studios paid \$3,000 for rent, \$1275 for utilities, and purchased goods subject to GST for \$65,000. What GST must be remitted by M Studios (or refunded by the CRA) for this quarter? (Assume GST = 5%)

251.Sam buys a sweater listed at \$100. How much will he pay for the sweater including taxes in: a) Ontario? b) Quebec? c) Alberta? d) Prince Edward Island? (Assume GST = 5%) 252.The town of Simcoe is considering raising the \$2 billion required for a sports complex by approving a new capital levy component of the property tax. The levy must be collected over the next five years. If the total assessed value of property in the town is \$875 billion, what additional tax will a home owner of a property assessed at \$300,000 pay?

253.Evaluate 8 - 5 × 2 - 3 =

A. -5 B. 3 C. 5

- D. -3
- E. 15

254.Evaluate 8 - 4 × (2 - 3) =

A4	
B. 12	
C. 5	
D. 11	
E. 4	

- A. 17
- B. 25
- C. 3
- D. 11
- E. 4

256.Evaluate 18 ÷ 3 + (8 - 4) × (2 - 3) =

- A. -10 B. 17 C. -18
- D. 2
- E. 4

257.Evaluate 8 - 4 × (2 - 3)² =

- A. 25
- B. -1
- C. 12
- D. 17
- E. 4

E. 1

259.	$3(2+1)^2+5^2$
Evaluate the following:	4 - 3 ²

- A. -7.4
- B. -10.4
- C. -14.8
- D. 10.4
- E. 7.4

260.Evaluate $3(8 - 4)^2 \times (2 - 3)^2 =$

- A. 400
- B. -400
- C. 48
- D. -48
- E. 93

261.Evaluate 3[4 + (5 - 3)²]² =

- A. 256
- B. 38,416
- C. 3600
- D. 192
- E. 576

262.Evaluate $(2 - 3 \times 4)^2 - 5 \times (5 - 6)^2 =$

- A. 11
- B. 125
- C. -21
- D. 95
- E. 395

263. Evaluate $\$1200(1+.0625\times\frac{7}{12})$

- A. \$743.75
- B. \$1725.00
- C. \$700.04
- D. \$1637.50
- E. \$1243.75

264. $\$1000 \left(1 + .045 \times \frac{17}{12}\right)$

- A. \$1063.75 B. \$1416.73
- C. \$1765.00
- D. \$1637.50
- E. \$1480.42

265. Evaluate $\$750 \left(1 - .0575 \times \frac{150}{365}\right)$

- A. \$749.98
- B. \$732.28
- C. \$308.20
- D. \$572.77
- E. \$767.72

266. Evaluate $\$650 \left(1 - .0625 \times \frac{21}{12}\right)$

- A. \$1137.39
- B. \$721.09
- C. \$578.91
- D. \$446.88
- E. \$576.06

267	\$1050	
207.	$\left(1+\frac{0.065}{3}\right)^{3}$	
Evaluate	$\begin{pmatrix} 1 \\ 12 \end{pmatrix}$	

- A. \$1067.16
- B. \$1035.95
- C. \$896.32
- D. \$1033.12
- E. \$1502.05



- A. \$25,588.46
- B. \$19,927.38
- C. \$19,072.38
- D. \$24,855.01
- E. \$24,425.08

269.
$$\frac{\$1500 \left(1 + 0.055 \times \frac{3}{12}\right)}{1 + 0.10 \times \frac{9}{12}}$$

Evaluate

- A. \$1414.53
- B. \$1843.18
- C. \$348.85
- D. \$454.56
- E. \$1625.58

270. $\frac{\$1750\left(1+\frac{0.11}{4}\right)^{3}}{1+0.075\times\frac{275}{365}}$

- A. \$1701.95
- B. \$1796.85
- C. \$2265.35
- D. \$1897.86
- E. \$2392.70

 $\$20,000\left[\frac{\left(1+\frac{0.05}{2}\right)^4-1}{\frac{0.05}{2}}\right]$ 271. Evaluate

- A. \$172,405.00
- B. \$82,207.63
- C. \$83,050.31
- D. \$41,525.16
- E. \$86,202.50





- A. \$2766.53
- B. \$1054.53
- C. \$19,072.06
- D. \$4218.14
- E. \$45,756.60

273.

Evaluate
$$\frac{\frac{\$900}{\left(1+\frac{0.055}{4}\right)^7-1}}{\frac{0.055}{4}}$$

- A. \$493.46
- B. \$27.22
- C. \$900.00
- D. \$84.52
- E. \$123.36



- A. \$43.31
- B. \$38.03
- C. \$86.61
- D. \$83.98
- E. \$48.51

275.

$$\$110 \left[1 - \frac{3}{\left(1 + \frac{0.085}{12}\right)^5} \right] - \frac{\left(1 + \frac{0.085}{12}\right)^4}{\frac{0.085}{12}}$$
Evaluate

- A. -\$404.21
- B. -\$353.78
- C. -\$185.74
- D. -\$208.56
- E. -\$145.22

276.			$(1 + 0.04)^3$
	\$1500	$1 + \frac{1}{\left(1 - 0.04\right)^3}$	$-\frac{\left(1+\frac{1}{12}\right)}{\frac{0.04}{2}}$
Evaluate		$\left(1-\frac{1}{12}\right)$	12

- A. \$1489.85
- B. \$2892.41
- C. \$2712.09
- D. \$1177.64
- E. \$1818.11

277.What amount is 230% of \$450?

- A. \$103,500
- B. \$1.035
- C. \$51.11
- D. \$1035
- E. \$195.65
- A. \$8000
- B. \$800
- C. \$8
- D. \$.80
- E. \$80

279.\$135 is what percent of \$2750?

- A. 4.9%
- B. 0.49%
- C. 20.4%
- D. 0.204%
- E. 49.1%

280.\$4.55 is what percent of \$9100?

- A. 0.0005%
- B. 0.05%
- C. 0.5%
- D. 5%
- E. 20.0%

281.What percent of \$5000 is \$675?

- A. 0.135%
- B. 1.35%
- C. 13.5%
- D. 7.4%
- E. 0.74%

282.What percent of \$65 is \$1625?

- A. 25%
- B. 2.5%
- C. 250%
- D. 2500%
- E. 0.25%

283.78% of what amount is \$249.60?

- A. \$194.69
- B. \$70.40
- C. \$444.29
- D. \$373.89
- E. \$320

284.24% of what amount is \$162?

- A. \$675
- B. \$38.88
- C. \$513
- D. \$123.12
- E. \$389.88

285.\$8.75 is 0.07/8 % of what amount?

- A. \$100
- B. \$10,000
- C. \$1000
- D. \$1
- E. \$100,000

286.\$4.50 is 0.03/4 % of what amount?

- A. \$60
- B. \$600
- C. \$6000
- D. \$60,000
- E. \$6

- 287.Nitin earns \$48,000 per year. Determine his gross earnings each pay period in a year if he is paid biweekly. Assume there are 52 weeks in the year.
 - A. \$2000
 - B. \$4000
 - C. \$923.08
 - D. \$1846.15
 - E. \$1923.08
- 288.Nitin earns \$48,000 per year for a forty-hour work week. Determine his hourly rate of pay if he is paid biweekly. Assume there are 52 weeks in the year.
 - A. \$250.00
 - B. \$24.04
 - C. \$46.50
 - D. \$50.00
 - E. \$23.08
- 289.Nitin is paid a base salary of \$200 per week and commission at the rate of 3% for sales over \$5000, 4% if his sales are over \$8000, and 5% if sales are over \$15,000. How much will Nitin earn in a week in which his sales are \$20,000?
 - A. \$1200
 - B. \$1000
 - C. \$800
 - D. \$600
 - E. \$200

- 290.Nitin is paid a base salary of \$300 per week and commission at the rate of 2.5% for sales over \$5000, 4% if his sales are over \$10,000, and 4.5% if sales are over \$25,000. How much will Nitin earn in a week in which his sales are \$20,000?
 - A. \$800
 - B. \$1100
 - C. \$900
 - D. \$1200
 - E. \$1125
- 291.Nitin is paid on a graduated commission scale. His base salary is \$250 per week and he receives commission at the rate of 2.5% for the first \$5000 of sales in a week, 4% on the next \$10,000, and 4.5% on all further sales. How much will Nitin earn in a week in which his sales are \$30,000?
 - A. \$1200
 - B. \$1350
 - C. \$1450
 - D. \$1600
 - E. \$1000

- 292.Nitin is paid on a graduated commission scale. His base salary is \$1500 per month and he receives commission at the rate of 2% for the first \$10,000 of sales in a month, 3% on the next \$20,000, and 4.5% on all further sales. How much will Nitin earn in a month in which his sales are \$60,000?
 - A. \$2150
 - B. \$2250
 - C. \$3750
 - D. \$3650
 - E. \$2500
- 293.A sales representative is paid the greater of \$950 or 8% of sales. At what volume of sales will he start to earn more from the commission-based compensation?
 - A. \$9500
 - B. \$1026
 - C. \$1875
 - D. \$1187.50
 - E. \$11,875
- 294.A sales representative is paid the greater of \$1275 per week or 9% of sales. At what volume of sales will she start to earn more from the commission-based compensation?
 - A. \$14,166.67
 - B. \$1389.75
 - C. \$2295
 - D. \$2422.50
 - E. \$12,750

- 295.Nitin is paid on a graduated commission scale. He receives commission at the rate of 2.5% for the first \$5000 of sales in a week, 4% on the next \$10,000, and 4.5% on all further sales. What is Nitin's average rate of commission in a week in which his sales are \$30,000?
 - A. 3.67%
 - B. 4%
 - C. 3.33%
 - D. 3.75%
 - E. 4.25%
- 296.Nitin is paid on a graduated commission scale. He receives commission at the rate of 2% for the first \$10,000 of sales in a month, 3% on the next \$20,000, and 4.5% on all further sales. What is Nitin's average rate of commission in a month in which his sales are \$60,000?
 - A. 3.167%
 - B. 3.417%
 - C. 3.583%
 - D. \$5
 - E. 3.83%
- 297.Safa is paid a base salary of \$1500 per month and a commission of 6% on all sales over \$75,000. Last month, Safa's gross salary was \$4440. What were her sales for the month?
 - A. \$49,000
 - B. \$75,266.40
 - C. \$149,000
 - D. \$124,000
 - E. \$100,000

- 298.Isaac earns a base salary of \$1250 per month and a graduated commission of 0.4% on the first \$100,000 of sales, and 0.5% on sales over \$100,000. Last month, Isaac's gross salary was \$2025. What were his sales for the month?
 - A. \$75,000
 - B. \$200,000
 - C. \$312,500
 - D. \$250,000
 - E. \$175,000

299.Elita took six courses last semester. Her grades and course credits are as follows:

Course	Grade	Credits
Accounting	B+	4
Business Mathematics	А	4
Human Resources	В	3
Economics	C+	4
Computer Applications	С	2
Marketing	D	3

Use the Letter Grade to Grade Point Value conversion table below to calculate her grade point average for the semester.

Letter Grade	Grade Points
A+	4.0
A	4.0
B+	3.5
В	3.0
C+	2.5
С	2.0
D	1.0
F	0.0

- A. 2.8
- B. 2.7
- C. 3.3
- D. 3.0
- E. 3.5

300.Jayelle took six courses last semester. Her grades and course credits are as follows:

Course	Grade	Credits
Finance	B+	4
Statistics	С	2
General Education	\mathbf{B}^+	3
Macro Economics	В	3
Cost Accounting	В	4
Computer Applications	A+	2

Use the Letter Grade to Grade Point Value conversion table below to calculate her grade point average for the semester.

Letter Grade	Grade Points
A+	4.0
А	4.0
B+	3.5
В	3.0
C+	2.5
С	2.0
D	1.0
F	0.0

- A. 3.75
- B. 3.2
- C. 3.0
- D. 2.6
- E. 2.8

- 301.Kuldip invested \$5000 at 6%, \$10,000 at 5.5%, and \$20,000 at 4%. What is the average rate of interest earned by her investments?
 - A. 5.2%
 - B. 5%
 - C. 4.7%
 - D. 5.25%
 - E. 4.75%
- 302.Carlos invested \$10,000 at 7%, \$20,000 at 6.5%, and \$50,000 at 5%. What is the average rate of interest earned by his investments?
 - A. 6.2%
 - B. 5.5%
 - C. 5.8%
 - D. 5.6%
 - E. 6.3%

303.A customer has a first mortgage of \$100,000 at 5.5% and a second mortgage of \$50,000 at

7.8%. What is the average rate of mortgage that the customer pays?

- A. 6.7%
- B. 7%
- C. 5.9%
- D. 6.5%
- E. 6.3%

304.A client has a first mortgage of \$175,000 at 5.8% and a second mortgage of \$25,000 at 6.7%. What is the average rate of mortgage that the client pays?

A. 5.9%

- B. 6.3%
- C. 6.5%
- D. 6%
- E. 6.2%

305.Sonal bought a coat for \$198.88, which included 8% PST and 5% GST. What was the selling price of the coat?

- A. \$175.38
- B. \$176.00
- C. \$173.03
- D. \$182.97
- E. \$179.99

306.Sonal bought a new sound system for her car costing \$604.79. Sonal lives in Calgary, and so the price included 5% GST. What was the selling price of the new sound system?

- A. \$573.17
- B. \$574.58
- C. \$575.99
- D. \$616.31
- E. \$570.66

307.Calculate the PST on a sweater costing \$59.95 in Ontario, Alberta, and Quebec. (Assume 5% GST).

A. \$4.77; \$4.20; \$4.50
B. \$4.20; \$4.77; \$4.50
C. \$4.20; \$4.50; \$4.77
D. \$4.80; \$0.00; \$4.72
E. \$4.77; \$0.00; \$4.20

308.Calculate the PST on a jacket costing \$89.50 in British Columbia, Manitoba, and Saskatchewan.

- A. \$5.71; \$5.71; \$6.27
- B. \$6.27; \$6.27; \$5.71
- C. \$5.37; \$6.71; \$5.27
- D. \$6.27; \$6.27; \$5.37
- E. \$6.27; \$6.27; \$4.48
- 309.M Studios (Calgary) had retail sales of \$166,425, including GST, for the last quarter. In the same period M Studios purchased \$45,000 worth of supplies and paid \$75,000 for store renovations, plus the GST on these goods and services. What GST must be remitted by M Studios (or refunded) for the last quarter? (Assume GST = 5%).
 - A. \$1925
 - B. \$2321.25
 - C. \$14,323.26
 - D. \$6071.25
 - E. \$4573.26

- 310.M Studios (Ontario) had retail sales of \$288,528.55, including PST and GST, for the last quarter. In the same period M Studios purchased \$250,000 worth of supplies and paid the GST on these goods. What GST must be remitted by M Studios (or refunded) for the last quarter? (Assume 8% PST and 5% GST).
 - A. \$50.99
 - B. \$266.75
 - C. \$1926.43
 - D. \$426.80
 - E. \$5008.71
- 311.A homeowner's tax statement lists the following mill rates for various municipal services:

Tax Rate	Mill Rate	
Schools	6.75	
City	7.21	
Water	0.92	
Sewers	0.87	

What is the property tax on a house assessed at \$300,000?

- A. \$4464
- B. \$4449
- C. \$4725
- D. \$2562
- E. \$2700

312.A homeowner's tax statement lists the following mill rates for various municipal services:

Tax Rate	Mill Rate
Schools	6.75
City	7.21
Water	0.92
Sewers	0.87

The homeowner paid \$3937.50 in property taxes last year. What is the assessed value of his property?

A. \$264,617

B. \$265,509

- C. \$461,066
- D. \$250,000
- E. \$437,500

313.



A. 0.465

B. 0.80625

C. 1.24031

D. 12.9

E. 2.15

314.Evaluate (8 - 5 ÷ 2) ÷ (12 × 3 - 6) =

- A. 5.4545
- B. 0.05
- C. -0.1528
- D. 6.5454
- E. 0.1833

315.Evaluate 0.5 × 0.001 =

- A. 0.0005
- B. 0.005
- C. $\frac{51}{10,000}$
- D. $\frac{3}{2000}$

E. 5000

316. $\underbrace{\frac{\frac{6}{7}+\frac{2}{3}}{\frac{3}{7}}}_{\text{Evaluate}}$

- A. 24.89
- B. 3.556
- C. 4.190
- D. 6.429
- E. 5.071

317.Evaluate (8 ÷ 5 - 2) ÷ (12 - 2 - 4) =

A. 2.4 B. -0.067 C. -2.4

- D. 0.444
- E. -I.0

318.Evaluate -14(2) + 16 ÷ 32 + 4 =

- A. -22
- B. $-24\frac{1}{2}$
- C. $^{-28\frac{4}{9}}$
- D. -24 4/9
- E. $^{-23\frac{1}{2}}$

319.Evaluate (25 - 9) ÷ (6 - 2)² =

Α.	256

- B. 1
- C. 8
- D. 4
- E. 0.5

320. $\frac{5 - (6 - 14)}{200 - 0.25 \times \frac{3000}{15}} =$

- A. 0.1267
- B. 0.052
- C. 0.0867
- D. 0.076
- E. -0.07667

321.	16 - 4 1 - 0.3	÷ 435
Evaluate		650) ₌

- A. 6.621
- B. 17.379
- C. 13.793
- D. 10.207
- E. 12.803

³²².Express as a percent: $\frac{40.3}{80}$

- A. 50.375%
- B. 0.0050375%
- C. 0.50375%
- D. 5.0375%
- E. 503.75%

- 323.A piece of property valued at \$2,000,000 is assessed for property tax purposes at 70% of its value. If the property tax is \$20.00 on each \$1000.00 of assessed value, what is the amount of tax?
 - A. \$23,700.00
 - B. \$4000.00
 - C. \$28,000.00
 - D. \$12,000.00
 - E. \$40,000.00
- 324.Calculate the price including both GST and PST, that an individual will pay for a car sold for \$26,995.00 in Manitoba (Assume GST = 5% and PST = 7%)
 - A. \$28,345
 - B. \$30,234
 - C. \$28,885
 - D. \$30,329
 - E. \$26,995
- 325.If the mill rate increases by 0.25 mills, what will be the dollar increase in property taxes on a house assessed at \$380,000?
 - A. \$950.00
 - B. \$0.95
 - C. \$9500
 - D. \$95.00
 - E. none of the above

326.Fred has an annual salary of \$40,000.00. He is paid semi-monthly and his regular workweek is 40 hours. What is his regular salary per pay period?

- A. \$1538.46
- B. \$1458.33
- C. \$3076.92
- D. \$1666.67
- E. \$3333.33

327.A class of 25 students wrote a term test. The results out of 30 marks are as follows:

Score:	10	15	20	25	30
Number of Students:	2	3	10	6	4

What was the average score on the test?

- A. 20
- B. 25
- C. 22
- D. 21.4
- E. 17.5

- 328.An investor purchased shares of Acme Company as follows: 500 shares @ \$10 per share, 10,000 shares @ \$6.00 per share, and 1000 shares at \$4.00 per share. What is the investor's average cost per share?
 - A. \$7.00
 - B. \$6.00
 - C. \$6.67
 - D. \$23,000
 - E. \$6.50

A municipality requires an extra \$3,000,000 for its operating budget next year. The current mill rate is 8.3573 and the assessed values of properties in the municipality remains constant at \$8.58 billion.

329.Calculate next year's mill rate.

- A. 8.3497
- B. 8.3923
- C. 11.8538
- D. 9.7684
- E. 8.7070

- 330.If the total of all assessed values rises by 5% over the current assessment, at what value must next year's mill rate be set?
 - A. 8.6903
 - B. 8.2923
 - C. 7.9923
 - D. 9.7684
 - E. 8.3906

Fred is paid an annual salary of \$45,800 on a biweekly schedule for a 40-hour work week and 26 biweekly periods per year.

331.What is his gross salary per pay period?

- A. \$1908.33
- B. \$1815.93
- C. \$1616.18
- D. \$1755.51
- E. \$1761.54

332. What is his hourly pay rate?

- A. \$44.44
- B. \$43.89
- C. \$47.71
- D. \$44.04
- E. \$38.76

- 333.What is his total remuneration for a two-week period in which he worked 4.5 hours overtime at time-and-a-half?
 - A. \$2058.81
 - B. \$2230.36
 - C. \$1858.23
 - D. \$1953.02
 - E. \$2051.75

Store A sold 30 units at \$1.25 per unit. Store B sold 60 units at \$1.95 per unit. Store C sold 9 units at \$1.50 per unit.

334. Ignoring the quantities sold, what was the average unit selling price for the three stores?

A. \$0.33
B. \$1.57
C. \$155.10
D. \$51.70
E. \$1.70

335.Recognizing the quantities sold, what was the average selling price per unit?

A. \$0.33 B. \$1.57 C. \$155.10 D. \$51.70 E. \$1.70

c1 Key

1. Evaluate the following: 20 - 4 × 2 - 8

4

Difficulty: Easy Jerome - Chapter 01 #1 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro

2. Evaluate the following: $18 \div 3 + 6 \times 2$

18

Difficulty: Easy Jerome - Chapter 01 #2 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro

3. Evaluate the following: (20 - 4) × 2 - 8

Jerome - Chapter 01 #3 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

4. Evaluate the following: $18 \div (3 + 6) \times 2$

4

Difficulty: Easy Jerome - Chapter 01 #4 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro

5. Evaluate the following: $20 - (4 \times 2 - 8)$

20

Difficulty: Easy Jerome - Chapter 01 #5 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro

6. Evaluate the following: $(18 \div 3 + 6) \times 2$

24

Jerome - Chapter 01 #6 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

7. Evaluate the following: $54 - 36 \div 4 + 2^2$

49

Difficulty: Easy Jerome - Chapter 01 #7 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro

8. Evaluate the following: $(5 + 3)^2 - 3^2 \div 9 + 3$

66

Difficulty: Easy Jerome - Chapter 01 #8 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro

9. Evaluate the following: $(54 - 36) \div (4 + 2)^2$

0.5

Jerome - Chapter 01 #9 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

10. Evaluate the following: $5 + (3^2 - 3)^2 \div (9 + 3)$

8

Difficulty: Easy Jerome - Chapter 01 #10 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro

11. Evaluate the following: $\frac{8^2-4^2}{(4-2)^3}$

6

Difficulty: Easy Jerome - Chapter 01 #11 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro 12. Evaluate the following: $\frac{(8-4)^2}{4-2^3}$

-4

Difficulty: Easy Jerome - Chapter 01 #12 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

13. Evaluate the following: $3(6 + 4)^2 - 5(17 - 20)^2$

255

Difficulty: Medium Jerome - Chapter 01 #13 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro

14. Evaluate the following: $(4 \times 3 - 2)^2 \div (4 - 3 \times 2^2)$

-12.5

Difficulty: Medium Jerome - Chapter 01 #14 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Woro 15. Evaluate the following: [(20 + 8 × 5) - 7 × (- 3)] ÷ 9

9

Difficulty: Medium Jerome - Chapter 01 #15 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

16. Evaluate the following: $5[19 + (5^2 - 16)^2]^2$

50,000

Difficulty: Medium Jerome - Chapter 01 #16 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

17. Evaluate the following correct to the cent: $\$100(1+0.06 \times \frac{45}{365})$

\$100.74

Difficulty: Medium Jerome - Chapter 01 #17 Learning Objective: 1 Source: student text Topic: Basic Mathematics

18		\$200
10.		$1+0.09 \times \frac{4}{1}$
	Evaluate the following correct to the cent:	12

\$194.17

Difficulty: Medium Jerome - Chapter 01 #18 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

19. Evaluate the following correct to the cent: $\frac{\$500}{(1+0.05)^2}$

\$453.51

Difficulty: Medium Jerome - Chapter 01 #19 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

20. Evaluate the following correct to the cent: $(1+0.02)^3$

\$1,061.21

Difficulty: Medium Jerome - Chapter 01 #20 Learning Objective: 1

21. Evaluate the following correct to the cent:
$$\$100 \left(\frac{(1+0.04)^2 - 1}{0.04} \right)$$

\$204.00

Difficulty: Medium Jerome - Chapter 01 #21 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora

22.
$$\$300 \begin{bmatrix} 1 - \frac{1}{(1+0.03)^2} \\ 0.03 \end{bmatrix}$$
Evaluate the following correct to the cent:

\$574.04

Difficulty: Hara Jerome - Chapter 01 #22 Learning Objective: 1 Source: student text Topic: Basic Mathematics Type: Wora 23. If you want four-figure accuracy in your answer, what minimum number of figures must be retained in the values used in the calculations?

five figures

Difficulty: Easy Jerome - Chapter 01 #23 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Concept

24. For a final result of approximately \$7000 to be accurate to the cent, what minimum number of figures must be maintained in the values used in the calculations?

seven figures

Difficulty: Easy Jerome - Chapter 01 #24 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Concept

25. If a final result of the order of five million dollars is to be accurate to the nearest dollar, what minimum number of figures must be maintained in the calculations?

eight figures

Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Concept

26. If an interest rate (which could be greater than 10%) is to be calculated to the nearest 0.01%, what minimum number of digits must be retained in the numbers used to calculate the interest rate?

five figures

Difficulty: Easy Jerome - Chapter 01 #26 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Concept

27. Give three examples of values which have only two or three digits but nevertheless are known with perfect accuracy.

number of months in a year, prescribed payments, prescribed values.

Difficulty: Easy Jerome - Chapter 01 #27 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Concept 28. If a time period of approximately five years is to be calculated to the nearest month, what minimum number of figures must be retained in the numbers used in the calculations?

three figures

Difficulty: Easy Jerome - Chapter 01 #28 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Concept

29. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{7}{8}$

0.875 = 87.500%

Difficulty: Easy Jerome - Chapter 01 #29 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

30. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{65}{104}$

0.625 = 62.500%

Jerome - Chapter 01 #30 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

31. The following fraction has a *terminating* decimal equivalent form. Express its decimal and

percent equivalent forms to five-figure accuracy: $\frac{47}{20}$

2.35 = 235.00%

Difficulty: Easy Jerome - Chapter 01 #31 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

32. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $-\frac{9}{16}$

-0.5625 = -56.25%

Difficulty: Easy Jerome - Chapter 01 #32 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro 33. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{-35}{25}$

-1.4 = -140.00%

Difficulty: Easy Jerome - Chapter 01 #33 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

34. The following mixed number has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $1\frac{7}{25}$

1.28 = 128.00%

Difficulty: Easy Jerome - Chapter 01 #34 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

35. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{25}{1000}$

0.025 = 2.5000%
Jerome - Chapter 01 #35 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

36. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{1000}{25}$

40 = 4000.0%

Difficulty: Easy Jerome - Chapter 01 #36 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

37. The following mixed number has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $2\frac{2}{100}$

2.02 = 202.00%

Difficulty: Easy Jerome - Chapter 01 #37 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro 38. The following mixed number has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $-1\frac{11}{32}$

-1.34375 = -134.38%

Difficulty: Easy Jerome - Chapter 01 #38 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

39. The following fraction has a *terminating* decimal equivalent form. Express its decimal and percent equivalent forms to five-figure accuracy: $\frac{37.5}{50}$

.75 = 75.000%

Difficulty: Easy Jerome - Chapter 01 #39 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro 40. The following fraction has a terminating decimal equivalent form. Express its decimal and

percent equivalent forms to five-figure accuracy: $\frac{22.5}{-12}$

-1.875 = -187.5%

Difficulty: Easy Jerome - Chapter 01 #40 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

41. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $\frac{5}{6}$

 $0.8\,\overline{3} = 83.\,\overline{3}\,\%$

Difficulty: Easy Jerome - Chapter 01 #41 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro 42. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $-\frac{8}{3}$

Difficulty: Easy Jerome - Chapter 01 #42 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

43. The following mixed number has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits.
⁷/₉

7. 7 = 777. <u>7</u> %

Difficulty: Easy Jerome - Chapter 01 #43 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora 44. The following mixed number has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. ¹/₁₁

 $1.\overline{09} = 109.\overline{09}$ %

Difficulty: Easy Jerome - Chapter 01 #44 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

45. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of 10

decimal places needed to display the repeating digit or group of digits. 9

1. $\overline{1}$ = 111. $\overline{1}$ %

Difficulty: Easy Jerome - Chapter 01 #45 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora 46. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $\frac{-4}{900}$

 $-0.00\overline{4} = -0.\overline{4}\%$

Difficulty: Easy Jerome - Chapter 01 #46 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

47. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $-\frac{7}{270}$

-0.0 259 = -2. 59 %

Difficulty: Easy Jerome - Chapter 01 #47 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora 48. The following fraction has a *repeating* decimal equivalent form. Express the decimal and percent equivalent form in the repeating decimal notation. Show just the minimum number of decimal places needed to display the repeating digit or group of digits. $\frac{37}{27}$

 $1.\overline{370} = 137.\overline{037}$ %

Difficulty: Easy Jerome - Chapter 01 #48 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

49. Round the following to four-figure accuracy: 11.3845

11.38

Difficulty: Easy Jerome - Chapter 01 #49 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

50. Round the following to four-figure accuracy: 9.6455

9.646

Difficulty: Easy Jerome - Chapter 01 #50 Learning Objective: 2;3

51. Round the following to four-figure accuracy: 0.5545454

0.5545

Difficulty: Easy Jerome - Chapter 01 #51 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

52. Round the following to four-figure accuracy: 1000.49

1000

Difficulty: Easy Jerome - Chapter 01 #52 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

53. Round the following to four-figure accuracy: 1.0023456

1.002

Difficulty: Easy Jerome - Chapter 01 #53 Learning Objective: 2;3

54. Round the following to four-figure accuracy: 0.030405

0.03041

Difficulty: Easy Jerome - Chapter 01 #54 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

55. Round the following to four-figure accuracy: 40.09515

40.10

Difficulty: Easy Jerome - Chapter 01 #55 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

56. Round the following to four-figure accuracy: 0.0090909

0.009091

Difficulty: Easy Jerome - Chapter 01 #56 Learning Objective: 2;3 57. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to five figures: $\frac{1}{6}$

0.16667 = 16.667%

Difficulty: Easy Jerome - Chapter 01 #57 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

58. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to five figures: $\frac{7}{6}$

1.1667 = 116.67%

Difficulty: Easy Jerome - Chapter 01 #58 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro 59. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded

to five figures: $\frac{1}{60}$

0.016667 = 1.6667%

Difficulty: Easy Jerome - Chapter 01 #59 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

60. Convert the following mixed number to its decimal equivalent and percent equivalent values, rounded to five figures: $2\frac{5}{9}$

2.5556 = 255.56%

Difficulty: Easy Jerome - Chapter 01 #60 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

61. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to five figures: $\frac{250}{365}$

0.68493 = 68.493%

Jerome - Chapter 01 #61 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

62. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to five figures: $\frac{15}{365}$

0.041096 = 4.1096%

Difficulty: Easy Jerome - Chapter 01 #62 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

63. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded to five figures: $\frac{0.11}{12}$

0.0091667 = 0.91667%

Difficulty: Easy Jerome - Chapter 01 #63 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro 64. Convert the following fraction to its decimal equivalent and percent equivalent values, rounded

to five figures: $\frac{0.095}{12}$

0.0079167 = 0.79167%

Difficulty: Easy Jerome - Chapter 01 #64 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

65.		\$92 1+ 0.095 ×	112
	Evaluate the following accurate to the nearest cent:	(365)

\$94.68

Difficulty: Easy Jerome - Chapter 01 #65 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

66. \$100 1 Evaluate the following accurate to the nearest cent:

$$100 \left(1+0.11 \times \frac{5}{12}\right)$$

\$104.58

Difficulty: Easy Jerome - Chapter 01 #66 Learning Objective: 2;3

Source: student text Topic: Basic Mathematics Type: Wora

67. Evaluate the following accurate to the nearest cent: $\frac{454.76 \left(1-0.105 \times \frac{11}{12}\right)}{12}$

\$410.99

Difficulty: Easy Jerome - Chapter 01 #67 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

68.		\$790.84
	Evaluate the following accurate to the nearest cent:	$1{+}~0.~13\times\tfrac{311}{365}$

\$711.98

Difficulty: Easy Jerome - Chapter 01 #68 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

60		\$3490
09.	Evaluate the following accurate to the nearest cent:	$1{+}0.125\times \tfrac{91}{365}$

\$3384.52

Difficulty: Easy Jerome - Chapter 01 #69 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

70		\$10,000
. 0.	Evaluate the following accurate to the nearest cent:	$1-0.10 imes rac{182}{365}$

\$10,524.80

Difficulty: Easy Jerome - Chapter 01 #70 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

71.

Evaluate the following accurate to the nearest cent:

 $650\left(1+\frac{0.105}{2}\right)^2$

\$720.04

Difficulty: Easy Jerome - Chapter 01 #71 Learning Objective: 2;3 Source: student text

Topic: Basic Mathematics Type: Wora

72. Evaluate the following accurate to the nearest cent:
$$\$950.75 \left(1 - \frac{0.095}{4}\right)^2$$

\$996.45

Difficulty: Easy Jerome - Chapter 01 #72 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

73. Evaluate the following accurate to the nearest cent:

\$14,435.88

Difficulty: Easy Jerome - Chapter 01 #73 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

74. Evaluate the following accurate to the nearest cent:

\$439.79

\$15,400 $\overline{\left(1+\frac{0.13}{12}\right)^6}$



Jerome - Chapter 01 #74 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

75.

$$\frac{\$6600 \bigl(1\!+0.085 \times \frac{153}{365}\bigr)}{1\!+0.125 \times \frac{82}{365}}$$

Evaluate the following accurate to the nearest cent:

\$6648.46

Difficulty: Medium Jerome - Chapter 01 #75 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

76.

Evaluate the following accurate to the nearest cent:

\$893.38

$$\frac{\$780 \Bigl(1+\frac{0.0825}{2}\Bigr)^5}{\Bigl(1+\frac{0.10}{12}\Bigr)^8}$$

Difficulty: Medium Jerome - Chapter 01 #76 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora 77.

Evaluate the following accurate to the nearest cent:

\$7159.48

Difficulty: Medium Jerome - Chapter 01 #77 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

78.

Evaluate the following accurate to the nearest cent:

\$1708.14

Difficulty: Medium Jerome - Chapter 01 #78 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

\$9500 79. $\frac{\left(1+\frac{0.075}{4}\right)^{5}-1}{\frac{0.075}{4}}$

Evaluate the following accurate to the nearest cent:

\$1830.07



 $\frac{\frac{\$350}{\frac{0.0975}{12}} 1 - \frac{1}{\left(1 + \frac{0.0975}{12}\right)^5}$

Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Wora

 $\$45\frac{\left[1-\frac{1}{\left(1+\frac{0.0837}{2}\right)^{4}}\right]}{\frac{0.0837}{2}}+\frac{\$1000}{\left(1+\frac{0.0837}{2}\right)^{4}}$

Evaluate the following accurate to the nearest cent:

\$1011.38

Difficulty: Haro Jerome - Chapter 01 #80 Learning Objective: 2;3 Source: student text Topic: Basic Mathematics Type: Woro

81. What is the percent *Rate* if a quantity is four times the size of the *Base*?

400%

Difficulty: Easy Jerome - Chapter 01 #81 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Concept

80.

0.1%

Difficulty: Easy Jerome - Chapter 01 #82 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Concept

83. If the percent *Rate* is 1000%, what multiple is the *Portion* of the *Base*?

10 times

Difficulty: Easy Jerome - Chapter 01 #83 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Concept

84. If the percent *Rate* is 0.01%, what fraction is the *Portion* of the *Base*?

1/10,000

Difficulty: Easy Jerome - Chapter 01 #84 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Concept 85. Calculate 1.75% of \$350 accurate to the cent.

\$6.13

Difficulty: Easy Jerome - Chapter 01 #85 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

86. Calculate 6.6% of \$666.66 accurate to the cent.

\$44.44

Difficulty: Easy Jerome - Chapter 01 #86 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

87. What percent is \$1.50 of \$11.50? Calculate to three-figure accuracy.

13.0%

Difficulty: Easy Jerome - Chapter 01 #87 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora 88. What percent is 88' of \$44? Calculate to three-figure accuracy.

2.00%

Difficulty: Easy Jerome - Chapter 01 #88 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

89. \$45 is 60% of what amount accurate to the cent?

\$75.00

Difficulty: Easy Jerome - Chapter 01 #89 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

90. \$69 is 30% of what amount accurate to the cent?

\$230.00

Difficulty: Easy Jerome - Chapter 01 #90 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora \$174.98

Difficulty: Easy Jerome - Chapter 01 #91 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

92. What amount is 0.075% of \$1650 accurate to the cent?

\$1.24

Difficulty: Easy Jerome - Chapter 01 #92 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

93. \$134 is what percent of \$67? Calculate to three-figure accuracy.

200%

Difficulty: Easy Jerome - Chapter 01 #93 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora 94. \$1.34 is what percent of \$655? Calculate to three-figure accuracy.

0.205%

Difficulty: Easy Jerome - Chapter 01 #94 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

95. 150% of \$60 is what amount accurate to the cent?

\$90.00

Difficulty: Easy Jerome - Chapter 01 #95 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

96. $0.58\overline{3}\%$ of \$1500 is what amount accurate to the cent?

\$8.75

Difficulty: Easy Jerome - Chapter 01 #96 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora \$19.47

Difficulty: Easy Jerome - Chapter 01 #97 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

98. 12³/₄% of what amount is \$27.50 accurate to the cent?

\$215.69

Difficulty: Easy Jerome - Chapter 01 #98 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

99. What percent of \$950 is \$590? Calculate to three-figure accuracy.

62.1%

Difficulty: Easy Jerome - Chapter 01 #99 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora 100. What percent of \$590 is \$950? Calculate to three-figure accuracy.

161%

Difficulty: Easy Jerome - Chapter 01 #100 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

101. 95% of what amount is \$100 accurate to the cent?

\$105.26

Difficulty: Easy Jerome - Chapter 01 #101 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

102. 8¹/₃% of what amount is \$10 accurate to the cent?

\$120.00

Difficulty: Easy Jerome - Chapter 01 #102 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro 103. 30 m is what percent of 3 km? Calculate to three-figure accuracy.

1.00%

Difficulty: Easy Jerome - Chapter 01 #103 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

104. 500 grams is what percent of 2.8 kilograms? Calculate to three-figure accuracy.

17.9%

Difficulty: Easy
Jerome - Chapter 01 #104
Learning Objective: 4
Source: student text
Topic: Basic Mathematics
Type: Word

105. How much is 1/2% of \$10 accurate to the cent?

\$0.05

Difficulty: Easy Jerome - Chapter 01 #105 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro \$0.75

Difficulty: Easy Jerome - Chapter 01 #106 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

107. \$180 is 120% of what amount accurate to the cent?

\$150.00

Difficulty: Easy Jerome - Chapter 01 #107 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

108. \$559.35 is 113% of what amount? Calculate to three-figure accuracy.

\$495.00

Difficulty: Easy Jerome - Chapter 01 #108 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro 109. 1301/2% of \$455 is what amount accurate to the cent?

\$593.78

Difficulty: Easy Jerome - Chapter 01 #109 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

110. 0.0505% of \$50,000 is what amount? Calculate to three-figure accuracy.

\$25.25

Difficulty: Easy Jerome - Chapter 01 #110 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

111. \$281.25 is 225% of what amount accurate to the cent?

\$125.00

Difficulty: Easy Jerome - Chapter 01 #111 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora \$285.71

Difficulty: Easy Jerome - Chapter 01 #112 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

113. \$10 is 0.5% of what amount accurate to the cent?

\$2000.00

Difficulty: Easy Jerome - Chapter 01 #113 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

114. \$1.25 is 34% of what amount accurate to the cent?

\$166.67

Difficulty: Medium Jerome - Chapter 01 #114 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora 115. Cecilia and Nathan estimate their total cost for a vacation in Australia to be \$14,775.

a) What percentage is this cost of their combined gross monthly income of \$8775?b) If 72% of their gross monthly income is already consumed by rent, taxes, car payments, and other regular living expenses, what percentage is the trip's cost of their remaining annual disposable income?

a. 168% b. 50.1%

Difficulty: Medium Jerome - Chapter 01 #115 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

116. In a one-month period, a convenience store had sales of \$65,560 from its gas pumps and sales of \$36,740 from other in-store products. What percent of total sales were from gasoline?

64.1% of total sales

Difficulty: Medium Jerome - Chapter 01 #116 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro 117. In a basketball game, the Langara College Falcons scored $54.\overline{54}$ % of 33 shots from the 2-point zone, $46.\overline{6}$ % of 15 attempts from the 3-point distance, and 79.3% of 29 foul shots (1 point each). How many points did the Falcons score?

80

Difficulty: Medium Jerome - Chapter 01 #117 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

118. A provincial Minister of Education recently announced that his government's forecast expenditure of \$2.68 billion on education next year represents 23.5% of the provincial budget. Rounded to the nearest million dollars, what is the province's total budget for the next year?

\$11404 billion

Difficulty: Medium Jerome - Chapter 01 #118 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro 119. Unusually high snowfall during the past winter resulted in Brockton's costs for snow plowing and removal to reach \$320,200. This represents 127% of its budgeted cost. Rounded to the nearest \$100, what amount did Brockton budget for snow clearance?

\$252,100 (to the nearest \$100)

Difficulty: Medium Jerome - Chapter 01 #119 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

120. The royalty rate performing artists receive from songs downloaded from Apple iTunes is 5.7%. If a band received royalties from Apple of \$99,736.41 for a year, how many song downloads at \$0.99 each did the band have for that year?

\$1,767,436

Difficulty: Medium Jerome - Chapter 01 #120 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro 121. Your regular workweek is 7.5 hours per day for five days. If you do not work on seven public holidays and you receive two weeks vacation, what percentage of the total hours in a year are you actually at work? Assume that a year has exactly 52 weeks.

20.9%

Difficulty: Medium Jerome - Chapter 01 #121 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

122. The Royal Canadian Mint sells one troy ounce (31.16 grams) platinum collector coins of 99.95% purity. How many milligrams of impurities are in a single coin?

15.58 mg

Difficulty: Medium Jerome - Chapter 01 #122 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

123. Ivory hand-soap is advertised as being ^{99⁴⁴/100} pure. (It floats!) How many milligrams of impurities are in a 150-gram bar of Ivory soap?

840 mg

Jerome - Chapter 01 #123 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

124. An online discount broker charges a transaction fee of \$30 plus an additional 3 cents per share. A full-service broker charges a commission rate of 2.4% of the total dollar value of a stock transaction. Suppose you purchase 200 shares of the Bank of Nova Scotia at \$55.40 per share. What percentage are the total fees charged by the online discount broker of the commission you would pay the full-service broker?

13.5%

Difficulty: Medium Jerome - Chapter 01 #124 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

125. A full-service broker charges a commission rate of 2.2% of the total dollar value of a stock transaction. A discount broker charges a transaction fee of \$25 plus an additional five cents per share. Suppose you purchase 800 shares of Talisman Energy at \$21.75 per share. What percentage of the commission fee charged by the full-service broker would you save by using the discount broker?

83.0%

Difficulty: Haro Jerome - Chapter 01 #125 Learning Objective: 4 Source: student text Topic: Basic Mathematics 126. A province's progressive income tax rates are structured as follows: 16% tax on the first \$15,000 of taxable income, 26% on the next \$20,000, 35% on the next \$40,000, and 45% on any additional taxable income. What percentage is an individual's total income tax of his (taxable) income if his taxable income for a year is:

a) \$33,000?

b) \$66,000?

c) \$99,000?

a. 21.5%; b. 28.0%; c. 32.7%

Difficulty: Hara Jerome - Chapter 01 #126 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

127. In 2009, Canada's population was 33,700,000 and Japan's population was 127,600,000. Canada's land area is 9,093,500 square kilometres but Japan's area is only 377,835 square kilometres. To the nearest 0.01%, what percentage was Canada's population density (people per square kilometre) of Japan's population density in 2009?

1.10% of Japan's population density

Difficulty: Haro Jerome - Chapter 01 #127 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro
128. A property sold for 250% of what the vendors originally paid for it. What was that original price if the recent selling price was \$210,000?

\$84,000

Difficulty: Medium Jerome - Chapter 01 #128 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

129. The Calgary Flames hockey team announced that its season's ticket sales of 11,542 represents 67.50% of the Pengrowth Saddledome's seating capacity. Rounded to the nearest 100, how many seats were not sold to season's ticket holders?

5600 (ronded to the nearest 100)

Difficulty: Medium Jerome - Chapter 01 #129 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro 130. The maximum amount an individual can contribute to her Registered Retirement Savings Plan (RRSP) for a year is set from time to time by the Regulations of the Income Tax Act. For the year 2010, the maximum contribution was the lesser of \$22,000 or 18% of the individual's "earned income" during 2009. What was the lowest amount of earned income for 2009 at which an individual could make a \$22,000 contribution in 2010? (Round to the nearest dollar.)

\$122,222

Difficulty: Haro Jerome - Chapter 01 #130 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro

131. Stan is a real estate salesperson. He receives 60% of the 4.8% commission that the real estate agency charges on sales. If his income for the past year was \$150,480, what was his dollar volume of sales for the year?

\$5,225,000

Difficulty: Medium Jerome - Chapter 01 #131 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro 132. A stockbroker is paid 45% of the commission her firm charges her clients. If she personally received \$134.55 on a \$11,500 transaction, what is the firm's commission rate?

2.60%

Difficulty: Medium Jerome - Chapter 01 #132 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Wora

133. A mortality rate indicates the fraction of individuals in a population who are expected to die in the next year.

a. If the mortality rate among 35-year-old males is 0.34%, what is the expected number of deaths per year among a province's total of 50,000 such males?b. If 35-year-old males constitute 0.83% of the overall population in a city of 1.45 million, how many deaths of such males are expected in that city in a year?

a) 170 b) 41

Difficulty: Haro Jerome - Chapter 01 #133 Learning Objective: 4 Source: student text Topic: Basic Mathematics Type: Woro 134. Aletta's annual salary of \$58,800 is paid weekly. She is paid at time and a half for any overtime beyond her regular workweek of 35 hours. What is her gross pay for a week in which she works 39 hours?

\$1130.77

Difficulty: Easy Jerome - Chapter 01 #134 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Wora

135. Lucille receives an annual salary of \$37,500 based on a 37.5-hour workweek. What are her gross earnings for a two-week pay period in which she works 9 hours of overtime at 1½ times her regular rate of pay?

\$1701.92

Difficulty: Easy Jerome - Chapter 01 #135 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro 136. Hasad is paid an annual salary of \$54,600 based on a 40-hour workweek. What is his gross pay for a biweekly pay period if he works 43 hours in the first week and 46.5 hours in the second week? Overtime is paid at time and a half.

\$2474.06

Difficulty: Easy Jerome - Chapter 01 #136 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Wora

137. Ross's compensation is to be changed from an hourly rate of \$31.50 for a 40-hour week to a salary paid semimonthly. What should he be paid semimonthly in order for his annual earnings to remain the same?

\$2730.00

Difficulty: Easy Jerome - Chapter 01 #137 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro 138. Allison's regular hourly rate of pay is \$17.70. She is paid time and a half for all work on weekends and for any time over 7.5 hours on weekdays. Calculate her gross earnings for a week in which she works 4.5, 0, 7.5, 8.5, 6, 6, and 9 hours on Saturday to Friday, respectively.

\$796.50

Difficulty: Easy Jerome - Chapter 01 #138 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro

139. Sam is paid \$34.50 per hour as a power plant engineer. He is paid 1½ times the regular rate for all time exceeding 8 hours in a day or 40 hours in a week. Statutory holidays worked are paid at double time (in addition to holiday pay). What were his gross earnings for a week in which he clocked 8, 9.5, 8, 8, 10, 0, and 8 hours on Saturday to Friday, respectively, where Monday was a statutory holiday?

\$2389.13

Difficulty: Easy Jerome - Chapter 01 #139 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro 140. Mary sews for a clothing manufacturer. She is paid \$7.50 per hour plus a piece rate that depends on the type of garment in production. The current production run is men's shirts, for which she is paid \$3.00 for each unit exceeding her quota of 20 shirts in an 8-hour shift. What will be her total pay for a regular workweek in which her output on successive days was 24, 26, 27, 28, and 30 shirts?

\$405.00

Difficulty: Easy Jerome - Chapter 01 #140 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro

141. Herb packs fish in 500-g cans on a processing line. He is paid \$8.25 per hour plus \$0.18 per kilogram for production in excess of 500 kg in a 7.5-hour shift. How much will he earn per day if he packs 250 cans per hour?

\$140.63

Difficulty: Medium Jerome - Chapter 01 #141 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro 142. Svetlana is an independent insurance broker placing various clients with any of several insurance companies. On homeowner insurance policies, each month she receives: \$20 for each renewal of an existing policy; \$35 for each policy placed with a new client; and 5.5% of the annual premiums on all policies (new and renewed) written in the month. In October, she placed 37 new-client policies representing \$14,375 in annual premiums and 126 policy renewals representing \$47,880 in annual premiums. What amount did Svetlana earn in October?

\$7239.03

Difficulty: Medium Jerome - Chapter 01 #142 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Wora

143. Hillary sells cosmetics from her part-time home-based business. She receives a straight commission of 21% from her supplier. At the year-end, she also receives a 7% bonus on sales exceeding her annual quota of \$100,000. What will her gross annual earnings be for a year in which her average monthly sales are \$11,000?

\$29,960

Difficulty: Medium Jerome - Chapter 01 #143 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro 144. Manfred is considering job offers of the same type of sales position from two retailers with similar product lines:

• Supreme Audio & Video is offering a base salary of \$2000 per month plus a 4% commission rate on sales;

• Buy-Right Electronics will pay a base salary of \$1500 per month plus commission rates of 3% on the first \$25,000 of sales and 6% on additional sales in a month.

Based on past experience in similar sales positions, Manfred is confident he can attain average monthly sales of \$55,000. At this level of sales, what would be his average gross earnings per month from each retailer?

\$4200 & \$4050

Difficulty: Medium Jerome - Chapter 01 #144 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Wora

145. A shoe salesman is paid the greater of \$600 per week or 11% of sales. a) What will be his earnings for a week in which sales are \$5636? b) At what volume of sales per week will he start to earn more from the commission based compensation?

a) \$619.96 and b) \$5454.55 per week

Difficulty: Haro Jerome - Chapter 01 #145 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro 146. Tom sells mutual funds on a graduated commission structure. He receives 3.3% on the first \$50,000 of sales in a month, 4.4% on the next \$50,000, and 5.5% on all further sales. What are his gross earnings for a month in which he sells \$140,000 worth of mutual funds?

\$6050.00

Difficulty: Medium Jerome - Chapter 01 #146 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro

147. Sharon is a manufacturer's representative selling office furniture directly to businesses. She receives a monthly salary of \$2000 plus a 2.2% commission on sales exceeding her quota of \$150,000 per month.

a) What are her earnings for a month in which she has \$227,000 in sales?

b) If her average monthly sales are \$235,000, what straight commission rate would generate the same average monthly earnings as her current basis of remuneration?

a) \$3694.00 and b) 1.6468%

Difficulty: Hara Jerome - Chapter 01 #147 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro

- 148. Julio is paid on a graduated commission scale of 5% on the first \$20,000 of sales in a month,7.5% on the next \$20,000, and 10% on all additional sales.
 - a) What will he be paid for a month in which his sales are \$54,880?
 - b) What single commission rate on all sales would result in the same earnings for the month?

a) \$3988.00 and b) 7.2668%

Difficulty: Haro Jerome - Chapter 01 #148 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro

149. Karen works in a retail computer store. She receives a weekly base salary of \$300 plus a commission of 3% of sales exceeding her quota of \$20,000 per week. What were her sales for a week in which she earned \$630.38?

\$31,012.67

Difficulty: Haro Jerome - Chapter 01 #149 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro 150. Jason's gross pay for August was \$3296.97 on sales totalling \$151,342. If his base salary is
\$1500 per month, what is his rate of commission on sales exceeding his monthly quota of
\$100,000?

3.50%

Difficulty: Haro Jerome - Chapter 01 #150 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro

151. Daniella's gross monthly earnings are based on commission rates of 4% of the first \$40,000 of sales, 5% of the next \$50,000, and 6% of all additional sales for the month. What was her sales total for a month in which she was paid \$5350?

\$110,833.33

Difficulty: Haro Jerome - Chapter 01 #151 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Woro 152. Trevor earns a base monthly salary of \$2000 plus a commission of 3% on sales exceeding his monthly quota of \$25,000. He receives a further 3% bonus on sales in excess of \$50,000. What must his sales be in order to gross \$4000 per month?

\$70,833.33

Difficulty: Hara Jerome - Chapter 01 #152 Learning Objective: 5 Source: student text Topic: Basic Mathematics Type: Wora

153. In what circumstance should you calculate a weighted average instead of a simple average?

You should calculate a weighted average when some of the values being averaged are more important or occur more frequently than other values.

Difficulty: Easy Jerome - Chapter 01 #153 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Concept 154. In what circumstances will the weighted average be equal to the simple average?

The weighted average will equal the simple average when the items being averaged all have the same weighting factor. In other words, each of the values being averaged has the same importance, or occurs the same number of times.

> Difficulty: Easy Jerome - Chapter 01 #154 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Concept

155. How must you allocate your money among a number of investments so that your portfolio's overall rate of return will be the same as the simple average of the rates of return on individual investments?

If you invest the same amount of money in each investment, each rate of return has the same importance. The portfolio's rate of return will then equal the simple average of the individual rates of return.

Difficulty: Medium Jerome - Chapter 01 #155 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Concept 156. Suppose that, one year ago, you invested \$20,000 in *mutual* fund A and \$10,000 in mutual fund B. Which fund had the higher rate of return in the past year if the weighted average of the two rates of return exceeds the simple average? Present your reasoning.

The simple average of *two* rates of return is *midway* between the individual rates of return. The weighted average of *two* rates of return will be closer to the value with the larger weighting factor. In the given situation, the rate of return on fund A has the larger weighting factor because more money was invested in fund A than in fund B. Therefore, the weighted average rate of return will lie on A's side of the mid-point (simple average). Since the weighted average exceeds the simple average, mutual fund A had the higher rate of return.

> Difficulty: Haro Jerome - Chapter 01 #156 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Concept

157. A survey of 254 randomly chosen residences in a city revealed that 4 had four television sets,
22 had three sets, 83 had two sets, 140 had one set, and 5 had no TV set at all. Based on the survey, what would you estimate to be the average number of TV sets per household?

1.53

Difficulty: Easy Jerome - Chapter 01 #157 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 158. An investor accumulated 1800 shares of Corel Corporation over a period of several months. She bought 1000 shares at \$15.63, 500 shares at \$19.00, and 300 shares at \$21.75. What was her average cost per share? (*Note*: Investors who purchase shares in the same company at more than one price must eventually do this calculation. Tax rules require that the capital gain or loss on the sale of any of the shares be calculated using the weighted-average price paid for all of the shares rather than the particular price paid for the shares actually sold.)

\$17.59

Difficulty: Easy Jerome - Chapter 01 #158 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro

159. A hockey goalie's "goals against average" (GAA) is the average number of goals scored against him per (complete) game. In his first 20 games in goal, O. U. Sieve had one shutout, two 1-goal games, three 2-goal games, four 3-goal games, seven 4-goal games, two 6-goal games, and one 10-goal disaster. Calculate his GAA.

3.50

Difficulty: Easy Jerome - Chapter 01 #159 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 160. Serge's graduated commission scale pays him 3% on his first \$30,000 in sales, 4% on the next \$20,000, and 6% on all additional sales in a month. What will be his average commission rate on sales for a month totalling a) \$60,000, b) \$100,000?

a) 3.83% and b) 4.70%

Difficulty: Easy Jerome - Chapter 01 #160 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Wora

161. The RBC Royal Bank offers an "add-on option" on fixed-rate mortgages. The option allows the customer to borrow additional funds partway through the term of the mortgage. The interest rate charged on the combined mortgage debt becomes the weighted average of the old rate on the former balance and the current competitive rate on new mortgage financing. Suppose Herschel and Julie had a mortgage balance of \$37,500 at 8%, when they borrowed another \$20,000 at 7%. What interest rate will they be charged by the RBC Royal Bank on the new consolidated balance?

7.65%

Difficulty: Easy Jerome - Chapter 01 #161 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 162. Margot's grades and course credits in her first semester at college are listed below.

Grade	C+	В-	\mathbf{B}^+	С-	В	С	
Credits	5	3	4	2	3	4	

Using the table in Example 1.5D for converting Letter Grades to grade Point Value, calculate Margot's grade point average for the semester.

2.53

Difficulty: Easy Jerome - Chapter 01 #162 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro

163. The distribution of scores obtained by 30 students on a quiz marked out of 10 is listed below.

Score	10	9	8	7	6	5	4	3	2	1	
Number of Students	2	6	9	7	3	2	0	1	0	0	

What was the average score on the test?

7.53

Difficulty: Easy Jerome - Chapter 01 #163 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 164. Alihan's transcript shows the following academic record for four semesters of part-time college studies. Calculate his cumulative GPA at the end of his fourth semester.

Semester	Credits	GPA
Ι	6	3.5
II	9	3.0
III	12	2.75
IV	7.5	3.2

3.04

Difficulty: Easy Jerome - Chapter 01 #164 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Wora

165. The "age" of an account receivable is the length of time that it has been outstanding. At the end of October, a firm has \$12,570 in receivables that are 30 days "old," \$6,850 that are 60 days "old," and \$1325 that are 90 days "old." What is the average "age" of its accounts receivable at the end of October?

43.74 days

Difficulty: Medium Jerome - Chapter 01 #165 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Wora 166. One year ago, Sook-Yin allocated the funds in her portfolio among five securities in the proportions listed below. The rate of (total) return on each security for the year is given in the third column of the table.

	Portion	Rate of Return
Security	invested	for the year
Company A Shares	15%	14%
Province A Bonds	20	10
Company C Shares	10	-13
Units in Fund D	35	12
Company E Shares	20	27

Calculate the rate of return for the entire portfolio.

12.40%

Difficulty: Medium Jerome - Chapter 01 #166 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Wora 167. One of the methods permitted by Generally Accepted Accounting Principles for reporting the value of a firm's inventory is *weighted-average inventory pricing*. The Boswell Corporation began its fiscal year with an inventory of 156 units valued at \$10.55 per unit. During the year it made the purchases listed in the following table.

Date	Units Purchased	Unit Cost
February 10	300	\$10.86
June 3	1,000	10.47
August 23	500	10.97

At the end of the year, 239 units remained in inventory. Determine: a) The weighted-average cost of the units purchased during the year. b) The weighted-average cost of the beginning inventory and all units purchased during the year. c) The value of the ending inventory based on the weighted-average cost calculated in b.

a) \$10.67 and b) \$10.66 and c) \$2547.74

Difficulty: Medium Jerome - Chapter 01 #167 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro

168. Suppose a group of consumers spends 30% of its disposable income on food, 20% on clothing, and 50% on rent. If over the course of a year the price of food rose 10%, the price of clothing dropped 5%, and rent rose 15%, what was the average price increase experienced by these consumers?

Jerome - Chapter 01 #168 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Wora

169. A restaurant owner set her menu prices at a predetermined percentage of her input costs for food, ingredients, and beverages. The prices as a percentage of these costs for various menu categories are presented in the second column of the table. The third column presents the

Menu category	Menu price as a percentage of costs	Percentage of sales revenue
Appetizers	300%	10%
Entrees	200%	50%
Desserts	225%	25%
Beverages	250%	15%

breakdown of the restaurant's overall revenue from the four men categories. On average, what are menu prices as a percentage of the basic input costs? Overall, what are the input costs as a percentage of revenue?

226.25% of input costs; 44.20% of revenue

Difficulty: Hara Jerome - Chapter 01 #169 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 170. The balance on Nucorp's revolving loan began the month at \$35,000. On the eighth of the month another \$10,000 was borrowed. Nucorp was able to repay \$20,000 on the 25th of the 31-day month. What was the average balance on the loan during the month? (Use each day's closing balance as the loan balance for the day.)

\$38,225.81

Difficulty: Haro Jerome - Chapter 01 #170 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro

171. A seasonal manufacturing operation began the calendar year with 14 employees. During the year, employees were taken on or laid off on various dates as presented in the table below.

Date	Employee changes
April 1	7 hired
May 1	8 hired
June 1	11 hired
Sept. 1	6 laid off
Oct. 1	14 laid off

What was the average number of employees on the payroll during the calendar year? (Assume that each month has the same length.)

25.5

Difficulty: Haro Jerome - Chapter 01 #171 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 172. Marcel must temporarily invest extra money in his retail business every fall to purchase additional inventory for the Christmas season. On September 1 he already had a total of \$57,000 invested in his business. Subsequently, he invested or withdrew cash on various dates as shown in the following table.

Date	Additional injection or withdrawal
Oct. 1	\$15,000 injection
Nov. 1	\$27,000 injection
Feb. 1	\$23,000 withdrawal
March 1	\$13,000 withdrawal
May 1	\$6000 withdrawal

What was the average cumulative investment in the business during the period from September 1 to August 31? (Assume that each month has the same length.)

\$71,333.33

Difficulty: Haro Jerome - Chapter 01 #172 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 173. When a company calculates its earnings per common share for its financial statements, it uses the weighted-average number of common shares outstanding during the year. Enertec Corp. began its fiscal year (January 1 to December 31) with 5 million common shares outstanding. Additional common shares were issued during the year as indicated in the following table.

Date	Event	Additional shares issued
March 1	New public offering	1,000,000
June 1	Employees and officers exercise stock options	500,000
Nov. 1	Convertible bonds exchanged for shares	750,000

What was average number of common shares outstanding during the year? (Assume that each month has the same length.)

6,250,000

Difficulty: Medium Jerome - Chapter 01 #173 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 174. Lien, the proprietor of a grocery store, prepares her Deluxe Nut Combo by mixing various ingredients she buys in bulk. The second column of the following table presents the amount of each ingredient Lien uses in making a batch of the Combo mix. In order to set the retail price of the Deluxe Nut Combo at 150% of her cost, Lien must determine her cost based on the average wholesale cost of the ingredients given in the third column.

Ingredient	Amount	Cost per kg
Peanuts	5 kg	\$2.95
Cashews	2 kg	\$9.50
Almonds	1 kg	\$11.50
Sunflower seeds	500 g	\$2.75
Raisins	400 g	\$3.60
Smarties	300 g	\$6.40

- a. What is Lien's average cost per 100 g of her Deluxe Nut Combo?
- b. What is her retail price per 100 g?

a) \$0.5433 per 100g b) \$0.81 per 100g

Difficulty: Medium Jerome - Chapter 01 #174 Learning Objective: 6 Source: student text Topic: Basic Mathematics Type: Woro 175. Johnston Distributing, Inc. files quarterly GST returns. The purchases on which it paid the GST and the sales on which it collected the GST for the last four quarters were as follows:

Quarter	Purchases	Sales	
1	\$596,476	\$751,841	
2	967,679	627,374	
3	823,268	1,231,916	
4	829,804	994,622	

Calculate the GST remittance or refund due for each quarter.

Q1) \$9321.90 and Q2) \$(20,418.30) and Q3) \$24,518.88 and Q4) \$9889.08

Difficulty: Easy Jerome - Chapter 01 #175 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Wora

176. Sawchuk's Home and Garden Centre files monthly GST returns. The purchases on which it paid the GST and the sales on which it collected the GST for the last four months were as follows:

Month	Purchases	Sales	
March	\$135,650	\$57,890	
April	213,425	205,170	
May	176,730	313,245	
June	153,715	268,590	

Calculate the GST remittance or refund due for each month.

March) \$(4665.60) and April) \$(495.30) and May) \$8190.90 and June) \$6892.50

177. Calculate the total amount, including both GST and PST, that an individual will pay for a car sold for \$39,500 in: a) Alberta b) Ontario c) Quebec.

a) \$41,475.00 and b) \$43,450.00 and c) \$44,585.63

Difficulty: Medium Jerome - Chapter 01 #177 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Woro

178. How much more will a consumer pay for an item listed at \$1000 (pretax) in Prince Edward Island than in Manitoba?

\$35.00

Difficulty: Medium Jerome - Chapter 01 #178 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Woro 179. a) What percentage is the HST of an HST-inclusive price in New Brunswick?

b) The total price including HST of an item is \$171.35. What is the amount of HST included in the price?

a. 11.5%; b. \$19.71

Difficulty: Medium Jerome - Chapter 01 #179 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Wora

180. To attract shoppers, retailers occasionally advertise something like "Pay no GST or PST!" Needless to say, neither the federal nor the provincial government is willing to forego its sales tax. In this situation, the retailer must calculate and remit the GST and PST as though the "ticket" price already includes these sales taxes. How much GST and PST must a Manitoba retailer report on a \$495 item that he sells on a Pay-No-GST-or- PST basis? (Hint: What percentage is the GST of a GST- and PST-inclusive price?)

GST = \$26.28 and PST = \$30.66

Difficulty: Medium Jerome - Chapter 01 #180 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Woro 181. What are the taxes on a property assessed at \$227,000 if the mill rate is 16.8629?

\$3827.88

Difficulty: Easy Jerome - Chapter 01 #181 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Woro

a) Express a property tax increase of 0.1 mill in terms of dollars per \$100 of assessed value?b) If the mill rate increases by 0.1 mill, what is the dollar increase in property taxes on a \$200,000 home?

a) \$0.01 per \$100 and b) \$20.00

Difficulty: Medium Jerome - Chapter 01 #182 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Wora

183. The assessment on a farm consists of \$143,000 for the house and \$467,000 for the land and buildings. A mill rate of 15.0294 applies to residences, and a rate of 4.6423 applies to agricultural land and buildings. What are the total property taxes payable on the farm?

\$4317.16

Jerome - Chapter 01 #183 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Woro

184. The assessed value on a property increased from \$285,000 last year to \$298,000 in the current year. Last year's property tax rate was \$1.56324 per \$100 of assessed value. a) What will be the change in the property tax from last year if the new tax rate is set at \$1.52193 per \$100? b) What would the new tax rate have to be for the dollar amount of the property taxes to be unchanged?

a) \$121.43 increase and b) \$1.49504 per \$100

Difficulty: Medium Jerome - Chapter 01 #184 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Woro

185. The school board in a municipality will require an extra \$2,430,000 for its operating budget next year. The current mill rate for the school tax component of property taxes is 7.1253. a) If the total of the assessed values of properties in the municipality remains at the current figure of \$6.78 billion, at what value must next year's school mill rate be set? b) If the total of all assessed values rises by 5% over this year's aggregate assessment, at what value must next year's school mill rate be set?

a) 7.4837 and b) 7.1273

186. The total assessed value of property in Brockton has risen by \$97 million from last year's figure of \$1.563 billion. The property tax rate last year for city services was \$0.94181 per \$100 of assessed value. If the city's budget has increased by \$750,000, what tax rate should it set for the current year?

\$0.93196 per \$100

Difficulty: Easy Jerome - Chapter 01 #186 Learning Objective: 7 Source: student text Topic: Basic Mathematics Type: Woro

187. a. Evaluate the following: $(2^3 - 3)^2 - 20 \div (2 + 2^3)$

23

Difficulty: Easy Jerome - Chapter 01 #187 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

188.	b. Evaluate the following:	$\left[4(2\times3^{2}-2^{3})^{2} \div (10-4\times5)\right]$
	-40	
		Difficulty: Easy Jerome - Chapter 01 #188 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro
189.	c. Evaluate the following:	$213.85\left(1-0.095\times\frac{5}{12}\right)$
	\$205.39	
		Difficulty: Easy
		Jerome - Chapter 01 #189
		Learning Objective: 1 (Review Problems)

190.

90.

d. Evaluate the following: $\frac{\$2315}{1+0.0825\times\frac{77}{365}}$

\$2275.40

Difficulty: Easy Jerome - Chapter 01 #190 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics

Source: student text Topic: Basic Mathematics

Type: Wora

191. e. Evaluate the following: $(1+\frac{0.105}{4})^2$

\$343.08

Difficulty: Easy Jerome - Chapter 01 #191 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro



\$619.94

Difficulty: Easy Jerome - Chapter 01 #192 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

193.	g. Evaluate the following:	\$885.75 1+0.0775	× 231 365	$-\frac{\$476.50}{1\!+\!0.0775\!\times\!\!\frac{49}{365}}$
------	----------------------------	-------------------	--------------	--

\$457.60

Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora

194.
h. Evaluate the following:
$$\$859 \left(1 + \frac{0.0825}{12}\right)^3 + \frac{\$682}{\left(1 + \frac{0.0825}{12}\right)^2}$$

\$1549.56

Difficulty: Medium Jerome - Chapter 01 #194 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

195. a. Evaluate the following:
$$96 - (6 - 4^2) \times 7 - 2$$

164

Difficulty: Easy Jerome - Chapter 01 #195 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora

29 Difficulty: Easy Jerome - Chapter 01 #196 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora $\frac{\$827.69}{1+0.125\times\frac{273}{365}} + \$531.49 \left(1+0.125\times\frac{41}{365}\right)$ 197. c. Evaluate the following: \$1295.88 Difficulty: Easy Jerome - Chapter 01 #197 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora $550.45 \left(1+0.0875 \times \frac{195}{365}\right) - \frac{376.29}{1+0.0875 \times \frac{99}{365}}$ 198. d. Evaluate the following:

\$208.62

Difficulty: Medium Jerome - Chapter 01 #198 Learning Objective: 1 (Review Problems) Source: student text
199		\$1137	1+ 0.0975	² _ \$2643
100.	e. Evaluate the following:	\$1137(1+ <u></u>	12	$\left(1+\frac{0.0975}{12}\right)^3$

\$3735.16

Difficulty: Medium Jerome - Chapter 01 #199 Learning Objective: 1 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora

200. What percent of \$6.39 is \$16.39?

256.5%

Difficulty: Easy Jerome - Chapter 01 #200 Learning Objective: 4 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora

201. 80% of what amount is \$100?

\$125.00

Difficulty: Easy Jerome - Chapter 01 #201 Learning Objective: 4 (Review Problems)

Source: student text Topic: Basic Mathematics Type: Wora

202. ¾% of what amount is \$1.00?

\$133.33

Difficulty: Easy Jerome - Chapter 01 #202 Learning Objective: 4 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

203. Fifteen minutes is what percentage of 2 hours?

12.5%

Difficulty: Easy Jerome - Chapter 01 #203 Learning Objective: 4 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

204. The actual profit of \$23,400 for the most recent fiscal quarter was 90% of the forecast profit. What was the forecast profit?

\$26,000.00

Jerome - Chapter 01 #204 Learning Objective: 4 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora

205. Renalda sold Westel stock that she purchased at \$2.20 per share one year ago for a 35% gain. At what price did she sell the stock?

\$2.97 per share

Difficulty: Easy Jerome - Chapter 01 #205 Learning Objective: 4 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

206. Luther is paid an annual salary of \$56,600 based on a 37½-hour workweek.

a) What is his equivalent hourly wage? (Assume that a year has exactly 52 weeks).

b) What would be his total remuneration for a bi-weekly pay period of that year if he worked

4.5 hours of overtime at time and a half?

a) \$29.03 and b) \$2372.85

Difficulty: Easy Jerome - Chapter 01 #206 Learning Objective: 5 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro 207. Istvan earns an annual salary of \$61,000 as an executive with a provincial utility. He is paid biweekly. During a strike, he worked 33 hours more than the regular 75 hours for a two-week pay period. What was his gross pay for that period if the company agreed to pay 1.5 times his equivalent hourly rate for overtime? (Assume that a year has exactly 52 weeks.)

\$3894.61

Difficulty: Medium Jerome - Chapter 01 #207 Learning Objective: 5 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

208. Sonja is paid \$42.50 per hour as a veterinarian. She is paid 1½ times the regular rate for all time exceeding 7½ hours in a day or 37½ hours per week. Work on a statutory holiday is paid at double time. What were her gross earnings for a week in which she worked 6, 0, 3, 7½, 9, 7½, and 8 hours on Saturday to Friday, respectively, and the Monday was a statutory holiday?

\$2231.25

Difficulty: Medium Jerome - Chapter 01 #208 Learning Objective: 5 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro 209. Marion receives a monthly base salary of \$1000. On the first \$10,000 of sales above her monthly quota of \$20,000, she is paid a commission of 8%. On any additional sales, the commission rate is 10%. What were her gross earnings for the month of August, in which she had sales amounting to \$38,670?

\$2667

Difficulty: Medium Jerome - Chapter 01 #209 Learning Objective: 5 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora

210. Lauren's gross pay for July was \$3188.35 on net sales totalling \$88,630. If her base salary is
\$1000 per month, what is her rate of commission on sales exceeding her monthly quota of
\$40,000?

4.50%

Difficulty: Medium Jerome - Chapter 01 #210 Learning Objective: 5 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro 211. Havel signed a listing agreement with a realtor. The commission rate is 4% on the first \$200,000 of the selling price, and 2.5% on the remainder. a) What commission will Havel pay if he sells his home for \$289,000? b) What is the average commission rate on the selling price?

a) \$10,225.00 and b) 3.54%

Difficulty: Easy Jerome - Chapter 01 #211 Learning Objective: 5 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

212. Through a calculation (on Canadian Individual Tax Returns) known as the "Old Age Security clawback," an individual receiving Old Age Security (OAS) benefits must repay an increasing proportion of these benefits to the federal government as the individual's net income rises beyond a certain threshold. If the OAS clawback is 15% of net income exceeding \$68,000, at what amount of net income must a taxpayer repay all \$6300 of OAS benefits received in the year?

\$110,000

Difficulty: Medium Jerome - Chapter 01 #212 Learning Objective: 4 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro 213. Ms. Yong invested a total of \$73,400 in three mutual funds as shown in the table below. The third column shows the change in value of each fund during the subsequent six months.

	Amount	Change
Mutual fund	Invested (\$)	in value (%)
Canadian equity fund	16,800	-4.3
US equity fund	25,600	-1.1
Global equity fund	31,000	8.2

What was the percent change in value of Ms. Yong's overall mutual fund portfolio during the six-month holding period?

2.10%

Difficulty: Medium Jerome - Chapter 01 #213 Learning Objective: 6 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora 214. One year ago Helga allocated the funds in her portfolio among five securities in the amounts listed in the following table. The rate of return on each security for the year is given in the third column of the table.

	Amount	Rate of return
Security	Invested	for the year
Company U shares	\$5000	30%
Province V bonds	20,000	-3
Company W shares	8000	-15
Units in Fund X	25,000	13
Company Y shares	4500	45

Calculate the rate of return for the entire portfolio.

7.96%

Difficulty: Medium Jerome - Chapter 01 #214 Learning Objective: 6 (Review Problems) Source: student text Topic: Basic Mathematics Type: Woro

215. Anthony began the year with \$96,400 already invested in his Snow 'n Ice retail store. He withdrew \$14,200 on March 1 and another \$21,800 on April 1. On August 1, he invested \$23,700, and on November 1 he contributed another \$19,300. What was his average cumulative investment during the year? (Assume that each month has the same length.)

\$81,308.33

Difficulty: Medium Jerome - Chapter 01 #215 Learning Objective: 6 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora 216. The fiscal year for Pine Valley Skiing Ltd., the owner of a downhill skiing facility, ends on June 30. The company began the recently completed fiscal year with its summer maintenance crew of 7. The following table presents the sequence of employee hirings and layoffs during the fiscal year.

Date	Employee changes
Sept. 1	6 hired
Nov. 1	18 hired
Dec. 1	23 hired
Mar. 1	11 laid off
Apr. 1	20 laid off
May 1	16 laid off

What was the average number of employees working for Pine Valley during the fiscal year? (Assume that each month has the same length.)

26.1

Difficulty: Medium Jerome - Chapter 01 #216 Learning Objective: 6 (Review Problems) Source: student text Topic: Basic Mathematics Type: Wora

217. Evaluate the answer correct to the cent: $\$250\left(1+0.05\times\frac{145}{365}\right)$

\$254.97

Difficulty: Medium Jerome - Chapter 01 #217 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Wora

218.	Evaluate the answer correct to the cent:	$\frac{\$2500}{1+0.06\times\frac{\$}{12}}$
	\$2,403.85	
219.	Evaluate the answer correct to the cent: \$4,622.78	$\begin{array}{c} Difficulty: Medium\\ Jerome - Chapter 01 \#218\\ Learning Objective: 1\\ Source: test bank\\ Topic: Basic Mathematics\\ Type: Wora\\ \\ \hline \frac{\$5000}{\left(1+0.04\right)^2} \end{array}$
		Difficulty: Medium

Jerome - Chapter 01 #219 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Woro

220. Evaluate the answer correct to the cent: $\$700(1+0.05)^3$

\$810.34

Difficulty: Medium Jerome - Chapter 01 #220 Learning Objective: 1 Source: test bank

221. Evaluate the answer correct to the cent:
$$\$1100 \left(\frac{(1+0.05)^2 - 1}{0.05} \right)$$

\$2,255

Difficulty: Medium Jerome - Chapter 01 #221 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Wora

222. Evaluate the answer correct to the cent:

\$3,093.70

Difficulty: Medium Jerome - Chapter 01 #222 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Wora

223		\$750
225.		$1+0.04\times\frac{5}{1}$
	Evaluate the answer correct to the cent:	110.04~12

\$737.70

 $3000\left(1+0.04\times\frac{285}{365}\right)$

Jerome - Chapter 01 #223 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: Woro

224.	Evaluate the answer correct to the cent:	$\frac{\$100}{1+.025 \times \frac{13}{12}}$	
	\$97.36		
			Difficulty: Medium Jerome - Chapter 01 #224 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: Woro
225.	Evaluate the answer correct to the cent:	$\frac{\$1000}{(1+0.05)^2}$	

\$907.03

Difficulty: Medium Jerome - Chapter 01 #225 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Woro 226. Evaluate the answer correct to the cent: $(1+0.04)^3$

\$1,912.27

Difficulty: Medium Jerome - Chapter 01 #226 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Woro

227.		$(1+0.045)^2 - 1$	
	Evaluate the answer correct to the cent:	0.045	

\$12,270

Difficulty: Medium Jerome - Chapter 01 #227 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Woro

228. $30 \div 3 + 12 \div 4$

13

Difficulty: Easy Jerome - Chapter 01 #228 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Woro 1

Difficulty: Easy Jerome - Chapter 01 #229 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Woro

230. $12 + 3\left[2 + (4^2 - 13)^2\right]^2$

375

Difficulty: Medium Jerome - Chapter 01 #230 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: Woro

231. $5 - (2 - 4)^2 + 2^3 - 4^2$

-7

Difficulty: Medium Jerome - Chapter 01 #231 Learning Objective: 1 Source: test bank Topic: Basic Mathematics 232. Convert the following to its decimal and percent equivalents. $2\frac{2}{5}$

2.4 = 240%

Difficulty: Easy Jerome - Chapter 01 #232 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: Woro

233. Convert the following to its decimal and percent equivalents. $\frac{0.050}{4}$

0.0125 = 1.25%

Difficulty: Medium Jerome - Chapter 01 #233 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: Wora

234. $\$500 \left[\frac{(1+0.04)^6 - 1}{0.04} \right]$

\$3316.49

Difficulty: Medium Jerome - Chapter 01 #234 Learning Objective: 2;3

Source: test bank Topic: Basic Mathematics Type: Wora



\$1250.54

Difficulty: Haro Jerome - Chapter 01 #235 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: Woro

236. Calculate 0.54% of \$200.

\$1.08

Difficulty: Easy Jerome - Chapter 01 #236 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: Woro

237. \$75 is 20% of what amount?

16

Jerome - Chapter 01 #237 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: Woro

238. Syed's net pay is 81% of his gross pay. His net pay for two weeks is \$1069.20. What is his gross pay for two weeks?

\$1,320.00

Difficulty: Medium Jerome - Chapter 01 #238 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: Woro

239. What percent of \$1150 is \$1495?

130%

Difficulty: Medium Jerome - Chapter 01 #239 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: Woro 240. Hany earns \$17.00 per hour for a forty-hour week. His overtime rate is 1 ½ times any hours exceeding forty in a week. What will Sam's gross earnings be for a week if he works 42.5 hours?

\$743.75

Difficulty: Medium Jerome - Chapter 01 #240 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: Wora

241. Surinder works in a retail store in Square One in Mississauga. She earns a base salary of \$320 per week, and a commission of 3% on sales over her quota of \$5000. How much will Larissa earn if her sales for the week are: a) \$4500? b) \$8500?

\$320; \$425

Difficulty: Medium Jerome - Chapter 01 #241 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: Woro 242. Kristina is a sales representative for a pharmaceutical company. She is paid the greater of \$3500 per month or 5% of sales. a) What are her earnings for the month if her sales are \$60,000? \$78,000? b) At what volume of sales per month will she start to earn more from the commission-based compensation?

a) \$3500; \$3900; b) \$3500

Difficulty: Hara Jerome - Chapter 01 #242 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: Woro

243. Safa's gross pay last month was \$3300.00. Her base salary is \$3000 per month, plus a commission of 2% on sales over \$60,000. What were Safa's sales for last month?

\$75,000

Difficulty: Haro Jerome - Chapter 01 #243 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: Woro 244. Cliff is a sales manager for a convention centre. He is paid on a graduated commission scale of 0.5% on the first \$200,000, 0.7% on the next \$300,000, and 0.8% on all additional sales for the month. What are Cliff's gross earnings in a month in which he sells: a) \$400,000? b) \$700,000?

\$2400; \$4700

Difficulty: Medium Jerome - Chapter 01 #244 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: Woro

245. Fatima took six courses last semester. Her grades and course credits are as follows:

Course	Grade	Credits
Accounting	$\mathbf{B}+$	3
Business Mathematics	А	4
Human Resources	В	3
Economics	C+	3
Computer Applications	А	2
Marketing	В	3

Using the Letter Grade to Grade Point Value conversion table in Example 1.5B, calculate her grade point average for the semester.

3.27

Difficulty: Medium Jerome - Chapter 01 #245 Learning Objective: 6 Source: test bank Topic: Basic Mathematics 246. The following grades are from the first business mathematics test in the semester. What is the class average?

Grade	Number of Students
100	2
97	3
95	4
91	1
88	2
87	2
85	3
80	5
78	3
77	2
75	4
65	2
60	3
58	4
41	1
40	1

78

Difficulty: Medium Jerome - Chapter 01 #246 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: Wora

247. Mrs. Sandhu invested \$10,000 at 5%, \$15,000 at 4%, and \$20,000 at 3%. Calculate Mrs. Sandhu's overall rate of return.

3.78%

Difficulty: Medium Jerome - Chapter 01 #247 Learning Objective: 6 Source: test bank 248. Akini is paid on a graduated commission scale of 1% on his first \$200,000 in sales, 2% on the next \$300,000, and 4% on all additional sales in a month. What is Akini's average commission rate on monthly sales totalling \$600,000?

2%

Difficulty: Medium Jerome - Chapter 01 #248 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: Woro

249. Jenna bought a car for \$42,050.90, which included 8% PST and 7% GST. What was the selling price of the car?

\$36,566.00

Difficulty: Medium Jerome - Chapter 01 #249 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: Wora 250. M Studios files GST returns quarterly. In the last quarter, M Studios sold picture frames totalling \$3,750, photographic equipment for \$78,225, and billed \$43,580 for studio work. In the same time period, M Studios paid \$3,000 for rent, \$1275 for utilities, and purchased goods subject to GST for \$65,000. What GST must be remitted by M Studios (or refunded by the CRA) for this guarter? (Assume GST = 5%)

remitt \$2814.00

Difficulty: Easy Jerome - Chapter 01 #250 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: Woro

251. Sam buys a sweater listed at \$100. How much will he pay for the sweater including taxes in: a)Ontario? b) Quebec? c) Alberta? d) Prince Edward Island? (Assume GST = 5%)

a) \$113; b) \$113.95: c) \$105; d) \$115.50

Difficulty: Medium Jerome - Chapter 01 #251 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: Woro 252. The town of Simcoe is considering raising the \$2 billion required for a sports complex by approving a new capital levy component of the property tax. The levy must be collected over the next five years. If the total assessed value of property in the town is \$875 billion, what additional tax will a home owner of a property assessed at \$300,000 pay?

\$137.14

Difficulty: Medium Jerome - Chapter 01 #252 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: Woro

253. Evaluate 8 - 5 × 2 - 3 =

- <u>A.</u> -5
- B. 3
- C. 5
- D. -3
- E. 15

Difficulty: Easy Jerome - Chapter 01 #253 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC 254. Evaluate 8 - 4 × (2 - 3) =

A. -4

<u>**B.**</u> 12

C. 5

D. 11

E. 4

Difficulty: Easy Jerome - Chapter 01 #254 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC

255. Evaluate 18 ÷ 3 + 8 - 4 × 2 - 3 =

A. 17

B. 25

<u>C.</u> 3

D. 11

E. 4

Difficulty: Easy Jerome - Chapter 01 #255 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC 256. Evaluate 18 ÷ 3 + (8 - 4) × (2 - 3) =

A. -10

- B. 17
- C. -18
- <u>D.</u>2
- E. 4

Difficulty: Easy Jerome - Chapter 01 #256 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC

257. Evaluate 8 - 4 × (2 - 3)² =

A. 25

- B. **-1**
- C. 12
- D. 17
- <u>E.</u> 4

Difficulty: Easy Jerome - Chapter 01 #257 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC 258. Evaluate 6 - 2 + 3 × (2 - 3)² =

<u>A.</u> 7

B. 12

C. -12

D. **-1**

E. 1

Difficulty: Easy Jerome - Chapter 01 #258 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC

259.		$3(2+1)^2 + 5^2$	
	Evaluate the following:	4 - 3 ²	

A. -7.4

<u>B.</u> -10.4

C. -14.8

D. 10.4

E. 7.4

Difficulty: Easy Jerome - Chapter 01 #259 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC 260. Evaluate $3(8 - 4)^2 \times (2 - 3)^2 =$

A. 400

- B. -400
- <u>C.</u> 48
- D. -48
- E. 93

Difficulty: Easy Jerome - Chapter 01 #260 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC

261. Evaluate $3[4 + (5 - 3)^2]^2 =$

- A. 256
- B. 38,416
- C. 3600
- <u>D.</u> 192
- E. 576

Difficulty: Easy Jerome - Chapter 01 #261 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC 262. Evaluate $(2 - 3 \times 4)^2 - 5 \times (5 - 6)^2 =$

A. 11

- B. 125
- C. -21
- <u>D.</u> 95
- E. 395

Difficulty: Easy Jerome - Chapter 01 #262 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC

263. **Evaluate** $\$1200 \left(1 + .0625 \times \frac{7}{12}\right)$

- A. \$743.75
- B. \$1725.00
- C. \$700.04
- D. \$1637.50

<u>E.</u> \$1243.75

Difficulty: Easy Jerome - Chapter 01 #263 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

- 264. $\$1000 \left(1 + .045 \times \frac{17}{12}\right)$
 - <u>A.</u> \$1063.75
 - B. \$1416.73
 - C. \$1765.00
 - D. \$1637.50
 - E. \$1480.42

Difficulty: Easy Jerome - Chapter 01 #264 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

265. Evaluate
$$\frac{5750\left(1-.0575\times\frac{150}{365}\right)}{5750\left(1-.0575\times\frac{150}{365}\right)}$$

- A. \$749.98
- <u>**B.**</u> \$732.28
- C. \$308.20
- D. \$572.77
- E. \$767.72

Difficulty: Easy Jerome - Chapter 01 #265 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC 266. Evaluate $\frac{650\left(1-.0625\times\frac{21}{12}\right)}{500}$

- A. \$1137.39
- B. \$721.09
- <u>C.</u> \$578.91
- D. \$446.88
- E. \$576.06

Difficulty: Easy Jerome - Chapter 01 #266 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

267		\$1050
207.		$\left(1+\frac{0.065}{12}\right)^3$
	Evaluate	$\begin{pmatrix} 12 \end{pmatrix}$

- A. \$1067.16
- B. \$1035.95
- C. \$896.32

<u>D.</u> \$1033.12

E. \$1502.05

Difficulty: Easy Jerome - Chapter 01 #267 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC 268.

- Evaluate $\frac{\$25,000}{\left(1+\frac{0.07}{12}\right)^4}$
- A. \$25,588.46
- B. \$19,927.38
- C. \$19,072.38
- D. \$24,855.01
- <u>E.</u> \$24,425.08

Difficulty: Easy Jerome - Chapter 01 #268 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

269.
$$\frac{\$1500 \left(1 + 0.055 \times \frac{3}{12}\right)}{1 + 0.10 \times \frac{9}{12}}$$

- <u>A.</u> \$1414.53
- B. \$1843.18
- C. \$348.85
- D. \$454.56
- E. \$1625.58

Difficulty: Medium Jerome - Chapter 01 #269 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC 270. $\frac{\$1750\left(1+\frac{0.11}{4}\right)^{3}}{1+0.075\times\frac{275}{365}}$

- A. \$1701.95
- **B.** \$1796.85
- C. \$2265.35
- D. \$1897.86
- E. \$2392.70

Difficulty: Medium Jerome - Chapter 01 #270 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC



- A. \$172,405.00
- B. \$82,207.63
- <u>C.</u> \$83,050.31
- D. \$41,525.16
- E. \$86,202.50

Difficulty: Medium Jerome - Chapter 01 #271 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC



- A. \$2766.53
- B. \$1054.53
- C. \$19,072.06
- <u>D.</u> \$4218.14
- E. \$45,756.60

Difficulty: Medium Jerome - Chapter 01 #272 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

273.



- A. \$493.46
- B. \$27.22
- C. \$900.00
- D. \$84.52
- <u>E.</u> \$123.36

Difficulty: Medium Jerome - Chapter 01 #273 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC 274.

Evaluate
$$\frac{\frac{\$2500}{\left(1-\frac{0.065}{2}\right)^4+1}}{\frac{0.065}{2}}$$

- <u>A.</u> \$43.31
- B. \$38.03
- C. \$86.61
- D. \$83.98
- E. \$48.51

Difficulty: Medium Jerome - Chapter 01 #274 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC



- A. -\$404.21
- **B.** -\$353.78
- C. -\$185.74
- D. -\$208.56
- E. -\$145.22

Difficulty: Haro Jerome - Chapter 01 #275 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC



- A. \$1489.85
- B. \$2892.41
- <u>C.</u> \$2712.09
- D. \$1177.64
- E. \$1818.11

Difficulty: Haro Jerome - Chapter 01 #276 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

- 277. What amount is 230% of \$450?
 - A. \$103,500
 - B. \$1.035
 - C. \$51.11
 - <u>D.</u> \$1035
 - E. \$195.65

Difficulty: Easy Jerome - Chapter 01 #277 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC
A. \$8000

- B. \$800
- C. \$8
- D. **\$.80**

<u>E.</u> \$80

Difficulty: Easy Jerome - Chapter 01 #278 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC

279. \$135 is what percent of \$2750?

<u>A.</u> 4.9%

- B. 0.49%
- C. 20.4%
- D. 0.204%
- E. 49.1%

Difficulty: Easy Jerome - Chapter 01 #279 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC 280. \$4.55 is what percent of \$9100?

A. 0.0005%

<u>**B.</u> 0.05%</u></u>**

C. 0.5%

D. 5%

E. 20.0%

Difficulty: Easy Jerome - Chapter 01 #280 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC

281. What percent of \$5000 is \$675?

A. 0.135%

- B. 1.35%
- <u>C.</u> 13.5%
- D. 7.4%

E. 0.74%

Difficulty: Easy Jerome - Chapter 01 #281 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC A. 25%

B. 2.5%

C. 250%

<u>D.</u> 2500%

E. 0.25%

Difficulty: Easy Jerome - Chapter 01 #282 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC

- 283. 78% of what amount is \$249.60?
 - A. \$194.69
 - B. \$70.40
 - C. \$444.29
 - D. \$373.89
 - <u>E.</u> \$320

Difficulty: Easy Jerome - Chapter 01 #283 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC 284. 24% of what amount is \$162?

<u>A.</u> \$675

B. \$38.88

C. \$513

D. \$123.12

E. \$389.88

Difficulty: Easy Jerome - Chapter 01 #284 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC

285. \$8.75 is 0.0⁷/₈ % of what amount?

A. \$100

<u>**B.**</u> \$10,000

C. \$1000

D. **\$1**

E. \$100,000

Difficulty: Medium Jerome - Chapter 01 #285 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC A. \$60

B. \$600

<u>C.</u> \$6000

D. \$60,000

E. **\$6**

Difficulty: Medium Jerome - Chapter 01 #286 Learning Objective: 4 Source: test bank Topic: Basic Mathematics Type: MC

- 287. Nitin earns \$48,000 per year. Determine his gross earnings each pay period in a year if he is paid biweekly. Assume there are 52 weeks in the year.
 - A. \$2000
 - B. \$4000
 - C. \$923.08
 - <u>D.</u> \$1846.15
 - E. \$1923.08

Difficulty: Easy Jerome - Chapter 01 #287 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 288. Nitin earns \$48,000 per year for a forty-hour work week. Determine his hourly rate of pay if he is paid biweekly. Assume there are 52 weeks in the year.
 - A. \$250.00
 - B. \$24.04
 - C. \$46.50
 - D. \$50.00
 - **E.** \$23.08

Difficulty: Easy Jerome - Chapter 01 #288 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 289. Nitin is paid a base salary of \$200 per week and commission at the rate of 3% for sales over \$5000, 4% if his sales are over \$8000, and 5% if sales are over \$15,000. How much will Nitin earn in a week in which his sales are \$20,000?
 - **A.** \$1200
 - B. \$1000
 - C. \$800
 - D. \$600
 - E. \$200

Difficulty: Easy Jerome - Chapter 01 #289 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 290. Nitin is paid a base salary of \$300 per week and commission at the rate of 2.5% for sales over \$5000, 4% if his sales are over \$10,000, and 4.5% if sales are over \$25,000. How much will Nitin earn in a week in which his sales are \$20,000?
 - A. \$800
 - **B.** \$1100
 - C. \$900
 - D. \$1200
 - E. \$1125

Difficulty: Easy Jerome - Chapter 01 #290 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 291. Nitin is paid on a graduated commission scale. His base salary is \$250 per week and he receives commission at the rate of 2.5% for the first \$5000 of sales in a week, 4% on the next \$10,000, and 4.5% on all further sales. How much will Nitin earn in a week in which his sales are \$30,000?
 - A. \$1200
 - B. \$1350
 - **C.** \$1450
 - D. \$1600
 - E. **\$1000**

Difficulty: Easy Jerome - Chapter 01 #291 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 292. Nitin is paid on a graduated commission scale. His base salary is \$1500 per month and he receives commission at the rate of 2% for the first \$10,000 of sales in a month, 3% on the next \$20,000, and 4.5% on all further sales. How much will Nitin earn in a month in which his sales are \$60,000?
 - A. \$2150
 - B. \$2250
 - C. \$3750
 - <u>D.</u> \$3650
 - E. \$2500

Difficulty: Easy Jerome - Chapter 01 #292 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 293. A sales representative is paid the greater of \$950 or 8% of sales. At what volume of sales will he start to earn more from the commission-based compensation?
 - A. \$9500
 - B. \$1026
 - C. \$1875
 - D. \$1187.50
 - E. \$11,875

Difficulty: Medium Jerome - Chapter 01 #293 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 294. A sales representative is paid the greater of \$1275 per week or 9% of sales. At what volume of sales will she start to earn more from the commission-based compensation?
 - A. \$14,166.67
 - B. \$1389.75
 - C. \$2295
 - D. \$2422.50
 - E. \$12,750

Difficulty: Medium Jerome - Chapter 01 #294 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 295. Nitin is paid on a graduated commission scale. He receives commission at the rate of 2.5% for the first \$5000 of sales in a week, 4% on the next \$10,000, and 4.5% on all further sales. What is Nitin's average rate of commission in a week in which his sales are \$30,000?
 - A. 3.67%
 - <u>**B.</u> 4%</u></u>**
 - C. 3.33%
 - D. 3.75%
 - E. 4.25%

Difficulty: Easy Jerome - Chapter 01 #295 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC 296. Nitin is paid on a graduated commission scale. He receives commission at the rate of 2% for the first \$10,000 of sales in a month, 3% on the next \$20,000, and 4.5% on all further sales. What is Nitin's average rate of commission in a month in which his sales are \$60,000?

A. 3.167%

B. 3.417%

- **C.** 3.583%
- D. **\$5**

E. 3.83%

Difficulty: Easy Jerome - Chapter 01 #296 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

297. Safa is paid a base salary of \$1500 per month and a commission of 6% on all sales over\$75,000. Last month, Safa's gross salary was \$4440. What were her sales for the month?

- A. \$49,000
- B. \$75,266.40
- C. \$149,000
- <u>D.</u> \$124,000
- E. \$100,000

Difficulty: Haro Jerome - Chapter 01 #297 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 298. Isaac earns a base salary of \$1250 per month and a graduated commission of 0.4% on the first \$100,000 of sales, and 0.5% on sales over \$100,000. Last month, Isaac's gross salary was \$2025. What were his sales for the month?
 - A. \$75,000
 - B. \$200,000
 - C. \$312,500
 - D. \$250,000
 - **E.** \$175,000

Difficulty: Hara Jerome - Chapter 01 #298 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC 299. Elita took six courses last semester. Her grades and course credits are as follows:

Course	Grade	Credits
Accounting	B+	4
Business Mathematics	А	4
Human Resources	В	3
Economics	C+	4
Computer Applications	С	2
Marketing	D	3

Use the Letter Grade to Grade Point Value conversion table below to calculate her grade point average for the semester.

Letter Grade	Grade Points
A+	4.0
A	4.0
B+	3.5
В	3.0
C+	2.5
С	2.0
D	1.0
F	0.0

<u>A.</u> 2.8

- B. 2.7
- C. 3.3
- D. 3.0
- E. 3.5

Difficulty: Easy Jerome - Chapter 01 #299 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC 300. Jayelle took six courses last semester. Her grades and course credits are as follows:

Course	Grade	Credits
Finance	$\mathbf{B}+$	4
Statistics	С	2
General Education	$\mathbf{B}+$	3
Macro Economics	В	3
Cost Accounting	В	4
Computer Applications	A+	2

Use the Letter Grade to Grade Point Value conversion table below to calculate her grade point average for the semester.

Letter Grade	Grade Points
A+	4.0
А	4.0
B+	3.5
В	3.0
C+	2.5
С	2.0
D	1.0
F	0.0

A. 3.75

<u>**B.**</u> 3.2

C. 3.0

D. 2.6

E. 2.8

Difficulty: Easy Jerome - Chapter 01 #300 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC 301. Kuldip invested \$5000 at 6%, \$10,000 at 5.5%, and \$20,000 at 4%. What is the average rate of interest earned by her investments?

A. 5.2%

B. 5%

<u>C.</u> 4.7%

D. 5.25%

E. 4.75%

Difficulty: Easy Jerome - Chapter 01 #301 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

- 302. Carlos invested \$10,000 at 7%, \$20,000 at 6.5%, and \$50,000 at 5%. What is the average rate of interest earned by his investments?
 - A. 6.2%
 - B. 5.5%

C. 5.8%

- <u>D.</u> 5.6%
- E. 6.3%

Difficulty: Easy Jerome - Chapter 01 #302 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

- 303. A customer has a first mortgage of \$100,000 at 5.5% and a second mortgage of \$50,000 at 7.8%. What is the average rate of mortgage that the customer pays?
 - A. 6.7%
 - B. 7%
 - C. 5.9%
 - D. 6.5%
 - <u>E.</u> 6.3%

Difficulty: Easy Jerome - Chapter 01 #303 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

- 304. A client has a first mortgage of \$175,000 at 5.8% and a second mortgage of \$25,000 at 6.7%.What is the average rate of mortgage that the client pays?
 - **A.** 5.9%
 - B. 6.3%
 - C. 6.5%
 - D. 6%
 - E. 6.2%

Difficulty: Easy Jerome - Chapter 01 #304 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

- 305. Sonal bought a coat for \$198.88, which included 8% PST and 5% GST. What was the selling price of the coat?
 - A. \$175.38
 - **B.** \$176.00
 - C. \$173.03
 - D. \$182.97
 - E. \$179.99

Difficulty: Easy Jerome - Chapter 01 #305 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

- 306. Sonal bought a new sound system for her car costing \$604.79. Sonal lives in Calgary, and so the price included 5% GST. What was the selling price of the new sound system?
 - A. \$573.17
 - B. \$574.58
 - <u>C.</u> \$575.99
 - D. \$616.31
 - E. \$570.66

Difficulty: Easy Jerome - Chapter 01 #306 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

- 307. Calculate the PST on a sweater costing \$59.95 in Ontario, Alberta, and Quebec. (Assume 5% GST).
 - A. \$4.77; \$4.20; \$4.50
 - B. \$4.20; \$4.77; \$4.50
 - C. \$4.20; \$4.50; \$4.77
 - **D.** \$4.80; \$0.00; \$4.72
 - E. \$4.77; \$0.00; \$4.20

Difficulty: Easy Jerome - Chapter 01 #307 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

- 308. Calculate the PST on a jacket costing \$89.50 in British Columbia, Manitoba, and Saskatchewan.
 - A. \$5.71; \$5.71; \$6.27
 - B. \$6.27; \$6.27; \$5.71
 - C. \$5.37; \$6.71; \$5.27
 - D. \$6.27; \$6.27; \$5.37
 - **E.** \$6.27; \$6.27; \$4.48

Difficulty: Easy Jerome - Chapter 01 #308 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

- 309. M Studios (Calgary) had retail sales of \$166,425, including GST, for the last quarter. In the same period M Studios purchased \$45,000 worth of supplies and paid \$75,000 for store renovations, plus the GST on these goods and services. What GST must be remitted by M Studios (or refunded) for the last quarter? (Assume GST = 5%).
 - A. \$1925
 - B. \$2321.25
 - C. \$14,323.26
 - D. \$6071.25
 - E. \$4573.26

Difficulty: Medium Jerome - Chapter 01 #309 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

- 310. M Studios (Ontario) had retail sales of \$288,528.55, including PST and GST, for the last quarter. In the same period M Studios purchased \$250,000 worth of supplies and paid the GST on these goods. What GST must be remitted by M Studios (or refunded) for the last quarter? (Assume 8% PST and 5% GST).
 - A. \$50.99
 - **B.** \$266.75
 - C. \$1926.43
 - D. \$426.80
 - E. \$5008.71

Difficulty: Medium Jerome - Chapter 01 #310 Learning Objective: 7 Source: test bank Topic: Basic Mathematics 311. A homeowner's tax statement lists the following mill rates for various municipal services:

Tax Rate	Mill Rate
Schools	6.75
City	7.21
Water	0.92
Sewers	0.87

What is the property tax on a house assessed at \$300,000?

A. \$4464

- B. \$4449
- <u>C.</u> \$4725
- D. \$2562
- E. \$2700

Difficulty: Easy Jerome - Chapter 01 #311 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC 312. A homeowner's tax statement lists the following mill rates for various municipal services:

Tax Rate	Mill Rate
Schools	6.75
City	7.21
Water	0.92
Sewers	0.87

The homeowner paid \$3937.50 in property taxes last year. What is the assessed value of his property?

- A. \$264,617
- B. \$265,509
- C. \$461,066
- D. \$250,000
- E. \$437,500

Difficulty: Medium Jerome - Chapter 01 #312 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

313.



- A. 0.465
- B. 0.80625
- C. 1.24031
- D. 12.9
- <u>E.</u> 2.15

Difficulty: Easy Jerome - Chapter 01 #313 Learning Objective: 2;3

Source: test bank Topic: Basic Mathematics Type: MC

- 314. Evaluate $(8 5 \div 2) \div (12 \times 3 6) =$
 - A. 5.4545
 - B. 0.05
 - C. -0.1528
 - D. 6.5454
 - **E.** 0.1833

Difficulty: Easy Jerome - Chapter 01 #314 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC

315. Evaluate 0.5 × 0.001 =

<u>A.</u> 0.0005

- B. 0.005
- C. ⁵¹/_{10,000}

D. $\frac{3}{2000}$

E. 5000

Difficulty: Medium Jerome - Chapter 01 #315 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

316.		$\frac{6}{7} + \frac{2}{3}$
	Evaluate	$\frac{3}{7}$

A. 24.89

<u>**B.**</u> 3.556

- C. 4.190
- D. 6.429
- E. 5.071

Difficulty: Medium Jerome - Chapter 01 #316 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

317. Evaluate (8 ÷ 5 - 2) ÷ (12 - 2 - 4) =

A. 2.4

- <u>**B.</u></u> -0.067</u>**
- C. -2.4
- D. 0.444
- E. -I.0

Difficulty: Easy Jerome - Chapter 01 #317 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC A. -22 B. $^{-24\frac{1}{2}}$ C. $^{-28\frac{4}{9}}$ D. $^{-24\frac{4}{9}}$ <u>E.</u> $^{-23\frac{1}{2}}$

> Difficulty: Easy Jerome - Chapter 01 #318 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC

319. Evaluate $(25 - 9) \div (6 - 2)^2 =$

A. 256

- **B.** 1
- C. 8
- D. 4
- E. 0.5

Difficulty: Easy Jerome - Chapter 01 #319 Learning Objective: 1 Source: test bank Topic: Basic Mathematics Type: MC

220		5 – (6 – 14)			
320.	200 0.25	3000			
	Evaluate	$200 - 0.23 \times$	15	=	

- A. 0.1267
- B. 0.052
- <u>C.</u> 0.0867
- D. 0.076
- E. -0.07667

Difficulty: Medium Jerome - Chapter 01 #320 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

321.		16 – 4	1 -	0.3 ÷	435
	Evaluate				650) <u></u>

- A. 6.621
- B. 17.379
- <u>C.</u> 13.793
- D. 10.207
- E. 12.803

Difficulty: Easy Jerome - Chapter 01 #321 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC 322. Express as a percent: $\frac{40.3}{80}$

- <u>A.</u> 50.375%
- B. 0.0050375%
- C. 0.50375%
- D. 5.0375%
- E. 503.75%

Difficulty: Easy Jerome - Chapter 01 #322 Learning Objective: 2;3 Source: test bank Topic: Basic Mathematics Type: MC

- 323. A piece of property valued at \$2,000,000 is assessed for property tax purposes at 70% of its value. If the property tax is \$20.00 on each \$1000.00 of assessed value, what is the amount of tax?
 - A. \$23,700.00
 - B. \$4000.00
 - **C.** \$28,000.00
 - D. \$12,000.00
 - E. \$40,000.00

Difficulty: Medium Jerome - Chapter 01 #323 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

- 324. Calculate the price including both GST and PST, that an individual will pay for a car sold for \$26,995.00 in Manitoba (Assume GST = 5% and PST = 7%)
 - A. \$28,345
 - **B.** \$30,234
 - C. \$28,885
 - D. \$30,329
 - E. \$26,995

Difficulty: Medium Jerome - Chapter 01 #324 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

- 325. If the mill rate increases by 0.25 mills, what will be the dollar increase in property taxes on a house assessed at \$380,000?
 - A. \$950.00
 - B. \$0.95
 - C. \$9500
 - <u>D.</u> \$95.00
 - E. none of the above

Difficulty: Easy Jerome - Chapter 01 #325 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

- 326. Fred has an annual salary of \$40,000.00. He is paid semi-monthly and his regular workweek is40 hours. What is his regular salary per pay period?
 - A. \$1538.46
 - B. \$1458.33
 - C. \$3076.92
 - D. \$1666.67
 - E. \$3333.33

Difficulty: Easy Jerome - Chapter 01 #326 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

327. A class of 25 students wrote a term test. The results out of 30 marks are as follows:

Score:	10	15	20	25	30
Number of Students:	2	3	10	6	4

What was the average score on the test?

- A. 20
- B. 25
- C. 22
- <u>D.</u> 21.4
- E. 17.5

Difficulty: Medium Jerome - Chapter 01 #327 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

- 328. An investor purchased shares of Acme Company as follows: 500 shares @ \$10 per share, 10,000 shares @ \$6.00 per share, and 1000 shares at \$4.00 per share. What is the investor's average cost per share?
 - A. \$7.00
 - <u>B.</u> \$6.00
 - C. \$6.67
 - D. \$23,000
 - E. \$6.50

Difficulty: Medium Jerome - Chapter 01 #328 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

A municipality requires an extra \$3,000,000 for its operating budget next year. The current mill rate is 8.3573 and the assessed values of properties in the municipality remains constant at \$8.58 billion.

Jerome - Chapter 01

329. Calculate next year's mill rate.

- A. 8.3497
- B. 8.3923
- C. 11.8538
- D. 9.7684
- <u>E.</u> 8.7070

Difficulty: Hara Jerome - Chapter 01 #329 Learning Objective: 7

- 330. If the total of all assessed values rises by 5% over the current assessment, at what value must next year's mill rate be set?
 - A. 8.6903
 - **B.** 8.2923
 - C. 7.9923
 - D. 9.7684
 - E. 8.3906

Difficulty: Medium Jerome - Chapter 01 #330 Learning Objective: 7 Source: test bank Topic: Basic Mathematics Type: MC

Fred is paid an annual salary of \$45,800 on a biweekly schedule for a 40-hour work week and 26 biweekly periods per year.

Jerome - Chapter 01

- 331. What is his gross salary per pay period?
 - A. \$1908.33
 - B. \$1815.93
 - C. \$1616.18
 - D. \$1755.51
 - <u>E.</u> \$1761.54

Difficulty: Easy Jerome - Chapter 01 #331 Learning Objective: 5

Source: test bank Topic: Basic Mathematics Type: MC

- 332. What is his hourly pay rate?
 - A. \$44.44
 - B. \$43.89
 - C. \$47.71
 - <u>D.</u> \$44.04
 - E. \$38.76

Difficulty: Easy Jerome - Chapter 01 #332 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC

- 333. What is his total remuneration for a two-week period in which he worked 4.5 hours overtime at time-and-a-half?
 - <u>A.</u> \$2058.81
 - B. \$2230.36
 - C. \$1858.23
 - D. \$1953.02
 - E. \$2051.75

Difficulty: Easy Jerome - Chapter 01 #333 Learning Objective: 5 Source: test bank Topic: Basic Mathematics Type: MC Store A sold 30 units at \$1.25 per unit. Store B sold 60 units at \$1.95 per unit. Store C sold 9 units at \$1.50 per unit.

Jerome - Chapter 01

334. Ignoring the quantities sold, what was the average unit selling price for the three stores?

- A. \$0.33
- **B.** \$1.57
- C. \$155.10
- D. \$51.70
- E. **\$1.70**

Difficulty: Medium Jerome - Chapter 01 #334 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

335. Recognizing the quantities sold, what was the average selling price per unit?

- A. \$0.33
- B. \$1.57
- C. \$155.10
- D. \$51.70
- <u>E.</u> \$1.70

Difficulty: Medium Jerome - Chapter 01 #335 Learning Objective: 6 Source: test bank Topic: Basic Mathematics Type: MC

Business Mathematics In Canada 7th Edition Jerome Test Bank

Full Download: https://alibabadownload.com/product/business-mathematics-in-canada-7th-edition-jerome-test-bank/

c1 Summary

Category	# of Questions
Difficulty: Easy	197
Difficulty: Hard	27
Difficulty: Medium	111
Jerome - Chapter 01	338
Learning Objective: 1	49
Learning Objective: 1 (Review Problems)	13
Learning Objective: 2;3	84
Learning Objective: 4	67
Learning Objective: 4 (Review Problems)	7
Learning Objective: 5	38
Learning Objective: 5 (Review Problems)	6
Learning Objective: 6	38
Learning Objective: 6 (Review Problems)	4
Learning Objective: 7	29
Source: student text	216
Source: test bank	119
Topic: Basic Mathematics	335
Type: Concept	14
Type: MC	83
Type: Word	238