

CHAPTER 2--DECIMALS

Student: _____

1. Use digits to write each number that is expressed in words.

- a. Eighteen and fifteen thousandths _____
- b. Seven and twenty-five thousandths _____
- c. Four hundred eighty-eight ten-thousandths _____

2. Use digits to write each number that is expressed in words.

- a. Thirty-five thousandths _____
- b. Five hundred thousand six and twelve thousandths _____
- c. Five thousand two hundred-thousandths _____

3. Use words to write each number that is expressed in digits.

- a. 4.284 _____
- b. 207.0027 _____
- c. 6.099 _____

4. Use words to write each number that is expressed in digits.

- a. 0.7008 _____
- b. 12.7344 _____

c. 4.00961 _____

5. Round each monetary amount to the nearest cent; round the non-monetary numbers to the nearest thousandth.

a. \$41.875 _____

b. \$1.2749 _____

c. 0.16493 inches _____

d. 0.22499 feet _____

e. 4.099489 pounds _____

f. \$0.44501 _____

6. Round each monetary amount to the nearest cent; round the nonmonetary numbers to the nearest thousandth.

a. \$0.24499 _____

b. \$36.4451 _____

c. 0.69164 pounds _____

d. 2.63151 gallons _____

e. 2.375388 feet _____

7. Add the following decimal numbers.

a.

$$\begin{array}{r} 0.885 \\ 0.39 \\ + 0.0053 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 0.146 \\ 1.7092 \\ + 0.0045 \\ \hline \end{array}$$

c.

$$\begin{array}{r} 1.356 \\ 0.4291 \\ + 2.99 \\ \hline \end{array}$$

8. Add the following decimal numbers.

a.

$$\begin{array}{r} 36.7484 \\ 590.28 \\ + 4.1763 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 904.98 \\ 72.5772 \\ + 2,404.115 \\ \hline \end{array}$$

c.

$$\begin{array}{r} 0.055 \\ 4.56 \\ + 39.7468 \\ \hline \end{array}$$

9. Add the following decimal numbers.

a.

$$\begin{array}{r} 0.854 \\ 0.86 \\ + 0.3528 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 0.85 \\ 0.3534 \\ + 0.688 \\ \hline \end{array}$$

c.

$$\begin{array}{r} 21.646 \\ 3.7179 \\ + 468.58 \\ \hline \end{array}$$

10. Add the following decimal numbers.

$$\begin{array}{r} \text{a.} \quad 49.8715 \\ 801.97 \\ + 48.4338 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b.} \quad 444.92 \\ 75.0886 \\ + 2,500. \\ \hline \end{array}$$

$$\begin{array}{r} \text{c.} \quad 0.07 \\ 1.283 \\ + 0.93 \\ \hline \end{array}$$

11. Subtract the following decimal numbers.

$$\begin{array}{r} \text{a.} \quad 4.5051 \\ - 0.31747 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b.} \quad 0.724 \\ - 0.4681 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c.} \quad 34.1023 \\ - 7.619 \\ \hline \end{array}$$

12. Subtract the following decimal numbers.

$$\begin{array}{r} \text{a.} \quad 414.02 \\ - 175.624 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b.} \quad 6,000. \\ - 197.462 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c.} \quad 2.101 \\ - 1.898 \\ \hline \end{array}$$

13. Subtract the following decimal numbers.

$$\begin{array}{r} \text{a.} \quad 1.00425 \\ - 0.32559 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b.} \quad 0.37 \\ - 0.2206 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c.} \quad 84.34475 \\ - 39.667 \\ \hline \end{array}$$

14. Subtract the following decimal numbers.

a.
$$\begin{array}{r} 207.011 \\ - 139.0125 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 5,000. \\ - 1,500.25 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 22.021 \\ - 6.45123 \\ \hline \end{array}$$

15. Three boxes of pears weighing 32.4, 33.8 and 33.4 pounds were shipped. Compute the total weight.

16. An electrical contractor started the day with 284.2 feet of 10 gauge copper wire. He used 42.5 feet on one job and 114.8 feet on another job. How many feet of wire did he have at the end of the day?

17. A restaurant had 18.6 pounds of pork on Wednesday morning and received 20.9 pounds Wednesday. On Thursday morning it had 9.8 pounds on hand. How many pounds did it use on Wednesday?

18. A salesperson drives 74.9 miles on Monday, 59.8 on Tuesday, 65.5 on Wednesday, and 86.4 on Thursday. On Friday the salesperson stayed home. What was the total distance traveled last week?

19. A grocery store had 76.4 pounds of chicken in refrigeration on Friday morning. During the day, customers purchased 48.9 pounds, and 8.8 pounds were waste and thrown away. Calculate the number of pounds that were left on Friday night.
20. A production engineer wanted to know how long it should take to make metal rods with a lathe. Four rods were made, and the time was recorded. The results were 28.5 seconds, 29.2 seconds, 31.8 seconds, and 29.7 seconds. Compute the total time to make all four rods.
21. A fresh produce wholesaler shipped 247.8 pounds of apples, 166.3 pounds of pears, and 109.7 pounds of plums to three small neighborhood grocery stores. What was the total weight of the fruit shipped?
22. On April 12, a tax accountant took six tax returns to the post office. They weighed 4.2, 7.7, 8.5, 6.3 8.1, and 6.3 ounces. Determine the total weight in ounces.
23. A pet store had \$468.42 cash on hand. It received cash payments of \$62.88 and \$59.14. It paid out \$56.50 to have the windows washed. Determine the amount of cash the pet store had left.

24. A pharmacy started the month with \$124.57 worth of dental floss. During the month, it received dental floss worth \$42.44 and sold dental floss worth \$89.95. Compute the value of the remaining dental floss.
25. A restaurant had \$356.87 cash on hand in the morning. Total cash receipts were \$873.45 from lunch and \$1,462.58 from dinner. The restaurant gave \$2,200 cash to a security service at closing time. What was the amount of cash on hand?
26. A hardware store sells most kinds of nails by the pound. A contractor bought 6.8 pounds of roofing nails, 7.7 pounds of "10-penny" nails, and 8.2 pounds of "8-penny" nails. Compute the total pounds of nails that the contractor bought.
27. A landscaping firm brought three trucks loaded with topsoil to a job site. Two trucks carried 7.75 cubic yards each, and one truck carried 5.25 cubic yards. When the job was finished, 3.5 cubic yards remained. Find the number of cubic yards used.

28. An office administrator finished word processing a two-page letter and its envelope in 13.8 minutes. He entered page one of the letter in 5.9 minutes and entered page two in 4.8 minutes. Compute the time that he spent printing the letter and preparing the envelope. (i.e., not entering the two pages of text).
29. To promote good employee health, the cafeteria at a corporation serves many fresh vegetables. It bought 21.4 pounds of celery, 33.2 pounds of carrots, 8.6 pounds of radishes, 12.8 pounds of broccoli, and 52.6 pounds of lettuce. What was the total weight of the vegetables purchased?
30. When it opened on Monday morning, a local delicatessen had 26.8 pounds of salami. During the week, it received a shipment of 84.9 pounds of salami. Also during the week, it used 42.8 pounds of salami in sandwiches and sold 34.2 pounds in bulk to retail customers. How much salami remained at the end of the week?
31. On Tuesday, a produce market sold 11.8 pounds of tangerines, 18.3 pounds of oranges and 12.5 pounds of grapefruit. On Saturday, it sold 19.4 pounds of tangerines, 31.7 pounds of oranges and 22.6 pounds of grapefruit. How many more pounds of these fruits did the market sell on Saturday than on Tuesday?

32. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. 5.193×6.2

b. $\$4.87 \times 25.2$

c. 9.486×0.037

33. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. 326.3×1.065

b. $\$76.44 \times 6.7$

c. $\$25.65 \times 4.27$

34. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. $\$46.82 \times 14.1$

b. 0.625×0.25

c. $\$427.79 \times 8.7$

35. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. 31.402×6.55

b. $\$15.375 \times 600$

c. 16.54×3.93

36. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. 5.95×0.025

b. $\$45.83 \times 21.6$

c. 470.028×0.0906

37. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. $\$0.625 \times 8,000$

b. 4.7807×1.309

c. $\$27.35 \times 16.75$

38. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

a. $\$17.55 \div 7$

b. $13.115 \div 3.28$

c. $1.32 \div 0.16$

39. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

a. $4.4868 \div 2.53$

b. $7.52 \div 0.45$

c. $\$154.75 \div 75$

40. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

a. $0.038 \div 0.007$

b. $\$358.88 \div 11.6$

c. $0.45409 \div 0.649$

41. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

a. $\$5.92 \div 0.25$

b. $\$1,524.50 \div 310$

c. $6.275 \div 13$

42. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

a. $\$72.63 \div 5.4$

b. $112.25 \div 8.27$

c. $\$306.03 \div 5.05$

43. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

a. $12.6 \div 0.692$

b. $627.17 \div 1.7$

c. $\$12.25 \div 40$

44. Solve the following multiplication and division problems by moving the decimal point to the right or left.

a. $\$41.00 \times 100 = \underline{\hspace{2cm}}$

b. $6.34 \text{ pints} \times 1,000 = \underline{\hspace{2cm}}$

c. $5,280 \text{ feet} \div 1,000 = \underline{\hspace{2cm}}$

- d. $\$15.42 \div 10,000 =$ _____
e. $7.47 \text{ yards} \div 100 =$ _____

45. Solve the following multiplication and division problems by moving the decimal point to the right or left.

- a. $745.6 \text{ ounces} \div 1000 =$ _____
b. $\$47.50 \div 10 =$ _____
c. $0.036 \text{ gallons} \div 10,000 =$ _____
d. $\$71.50 \div 10 =$ _____
e. $212.75 \text{ yards} \div 100 =$ _____

46. For each of the following multiplication and division problems, determine which estimate is most nearly correct.

- | | | |
|--|---|--|
| a. $0.391 \div 81.425$
A) 0.32
B) 3.2
C) 32
D) 320 | b. $0.0874 \div 0.0539$
A) 0.0045
B) 0.045
C) 0.45
D) 4.5 | c. $0.30667 \div 4.8508$
A) 0.15
B) 1.5
C) 15
D) 150 |
| d. $701.47 \div 19.15$
A) 0.35
B) 3.5
C) 35
D) 350 | e. $0.652 \div 0.816$
A) 0.08
B) 0.8
C) 8
D) 80 | f. $0.0000733 \div 0.0789$
A) 0.00009
B) 0.0009
C) 0.009
D) 0.09 |

47. David's Delicatessen sells macaroni salad for \$1.15 per half-pint. Using $1 \text{ quart} = 2 \text{ pints}$, compute the cost of 4.25 quarts of macaroni salad. (Round to the nearest cent.)
48. Waterfront Restaurant sells "chili-to-go" for \$8.75 per quart. Using $1 \text{ gallon} = 4 \text{ quarts}$, compute cost of 1.75 gallons of chili. (Round to the nearest cent.)
49. Kathy Reynolds, a college student, works as a part-time retail clerk in a clothing store. Kathy can buy clothes at a discount and earns \$12.45 per hour. Compute her earnings for a week when she worked 17.25 hours. (Round to the nearest cent.)
50. High school student Kevin Parris worked after school for 3.8 hours on Wednesday and 4.25 hours on Friday. Calculate the amount that Kevin earned at \$8.65 per hour. (Round to the nearest cent.)
51. Eleanor Gunther earned \$102.60 for working 6.75 hours. What was Eleanor's rate of pay per hour? (Round to the nearest cent.)

52. Oswald Garden Service charges \$16.55 per hour per man for general yard maintenance, but charges \$22.75 per hour for cement work and tree removal. Compute their total charges for a job which took 9.8 man-hours of general yard maintenance work and 3.6 man-hours of tree removal. (Round to the nearest cent.)
53. Betsy's new car travels 36.4 miles on one gallon of gasoline. How far can her car go on 8.25 gallons of gasoline? (Round to the nearest tenth)
54. Oscar's new pickup truck travels 30.8 miles on one gallon of gasoline. Compute the gallons of gasoline that his truck would use on a 450-mile journey. (Round to the nearest tenth.)
55. The former owner of a used car told the new buyer that the car could travel for 36.4 miles on one gallon of gasoline. The buyer tested the car by driving it for 170 miles on 4.5 gallons of gasoline. Was this better or worse than the claim, and by how many miles per gallon? (Round to the nearest tenth.)
56. In the winter, imported red bell peppers sell for \$4.99 per pound. What is the total price of six red peppers which have a combined weight of 3.16 pounds? (Round to the nearest cent.)

57. An automobile repair facility recently purchased a 200-foot roll of flexible plastic tubing for \$48.25. Compute the cost in cents per foot. (Round to the nearest cent.)
58. A hardware store sells rubber tubing by the foot. If a seventy-five-foot roll of tubing eventually sells for a total of \$54, how much did the store charge per foot? (Round to the nearest cent.)
59. Bill Pierson buys a 125-foot roll of latex tubing for \$35. Bill cuts the tubing into shorter pieces and resells all of it for a total of \$57.50. Compute Bill's profit per foot. (Round to the nearest cent.)
60. A certain cut of beef costs \$7.59 per pound, and a similar cut of pork costs \$5.19 per pound. What is the total cost of 3.25 pounds of the beef and 3.75 pounds of the pork? (Round to the nearest cent.)
61. A warehouse store sells a package of 125 steel washers for \$2.75. What is the price per washer when they are purchased in this package? (Find the price to the nearest tenth of a cent.)

62. The wholesale price of a plastic irrigation bubbler is 25 cents. How many plastic bubblers can be purchased for \$165? (Round to the nearest whole number.)
63. Rubber washers are sold for 37.5 cents per dozen, wholesale. Compute the amount that will be charged for 480 dozen washers. (Round to the nearest dollar.)
64. Large aluminum tubing costs \$1.27 per foot. At that price, what will be the total cost of 1,500 feet of the tubing? (Round to the nearest dollar.)
65. Julian's City Hardware store sells single strand 12-gauge copper electrical wire at 18 cents per foot. The same wire also comes in a 250-foot roll for \$37.49 a roll. At the 18 cents per foot price, how many feet would the customer be able to purchase for \$37.49? (Round to the nearest tenth.)
66. Seaside Fish Market sells halibut for \$16.49 per pound and red snapper for \$11.69 per pound. What is the total cost of 1.55 pounds of halibut and 2.77 pounds of red snapper? (Round to the nearest cent.)

67. Dave Miles earns \$10.60 per hour working in a restaurant on weekdays. If Dave works at least 30 hours during the week on weekdays, then he earns \$15.90 per hour on the following Saturday. How much would Dave earn during a week in which he worked 36.25 hours during a week and 7.5 additional hours on the following Saturday? (Round to the nearest cent.)

CHAPTER 2--DECIMALS KEY

1. Use digits to write each number that is expressed in words.

- a. Eighteen and fifteen thousandths _____
- b. Seven and twenty-five thousandths _____
- c. Four hundred eighty-eight ten-thousandths _____

- a. 18.015
- b. 7.025
- c. 0.0488

2. Use digits to write each number that is expressed in words.

- a. Thirty-five thousandths _____
- b. Five hundred thousand six and twelve thousandths _____
- c. Five thousand two hundred-thousandths _____

- a. 0.035
- b. 500,006.012
- c. 0.05002

3. Use words to write each number that is expressed in digits.

- a. 4.284 _____
- b. 207.0027 _____
- c. 6.099 _____

- a. four and two hundred eighty-four thousandths
- b. two hundred seven and twenty-seven ten-thousandths
- c. six and ninety-nine thousandths

4. Use words to write each number that is expressed in digits.

- a. 0.7008 _____
- b. 12.7344 _____
- c. 4.00961 _____

- a. seven thousand eight ten-thousandths
- b. twelve and seven thousand three hundred forty-four ten-thousandths
- c. four and nine hundred sixty-one hundred-thousandths

5. Round each monetary amount to the nearest cent; round the non-monetary numbers to the nearest thousandth.

- a. \$41.875 _____
- b. \$1.2749 _____
- c. 0.16493 inches _____

- d. 0.22499 feet _____
 e. 4.099489 pounds _____
 f. \$0.44501 _____

- a. \$41.88 b. \$1.27 c. 0.165 inches
 d. 0.225 feet e. 4.099 pounds f. \$0.45

6. Round each monetary amount to the nearest cent; round the nonmonetary numbers to the nearest thousandth.

- a. \$0.24499 _____
 b. \$36.4451 _____
 c. 0.69164 pounds _____
 d. 2.63151 gallons _____
 e. 2.375388 feet _____

- a. \$0.24 b. \$36.45 c. 0.692 pounds
 d. 2.632 gallons e. 2.375 feet

7. Add the following decimal numbers.

- a.
$$\begin{array}{r} 0.885 \\ 0.39 \\ + 0.0053 \\ \hline \end{array}$$
 b.
$$\begin{array}{r} 0.146 \\ 1.7092 \\ + 0.0045 \\ \hline \end{array}$$
 c.
$$\begin{array}{r} 1.356 \\ 0.4291 \\ + 2.99 \\ \hline \end{array}$$

- a. 1.2803 b. 1.8597 c. 4.7751

8. Add the following decimal numbers.

- a.
$$\begin{array}{r} 36.7484 \\ 590.28 \\ + 4.1763 \\ \hline \end{array}$$
 b.
$$\begin{array}{r} 904.98 \\ 72.5772 \\ + 2,404.115 \\ \hline \end{array}$$
 c.
$$\begin{array}{r} 0.055 \\ 4.56 \\ + 39.7468 \\ \hline \end{array}$$

- a. 631.2047 b. 3,381.6722 c. 44.3618

9. Add the following decimal numbers.

- a.
$$\begin{array}{r} 0.854 \\ 0.86 \\ + 0.3528 \\ \hline \end{array}$$
 b.
$$\begin{array}{r} 0.85 \\ 0.3534 \\ + 0.688 \\ \hline \end{array}$$
 c.
$$\begin{array}{r} 21.646 \\ 3.7179 \\ + 468.58 \\ \hline \end{array}$$

- a. 2.0668 b. 1.8914 c. 493.9439

10. Add the following decimal numbers.

a.
$$\begin{array}{r} 49.8715 \\ 801.97 \\ + 48.4338 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 444.92 \\ 75.0886 \\ + 2,500. \\ \hline \end{array}$$

c.
$$\begin{array}{r} 0.07 \\ 1.283 \\ + 0.93 \\ \hline \end{array}$$

a. 900.2753

b. 3,020.0086

c. 2.283

11. Subtract the following decimal numbers.

a.
$$\begin{array}{r} 4.5051 \\ - 0.31747 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 0.724 \\ - 0.4681 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 34.1023 \\ - 7.619 \\ \hline \end{array}$$

a. 4.18763

b. 0.2559

c. 26.4833

12. Subtract the following decimal numbers.

a.
$$\begin{array}{r} 414.02 \\ - 175.624 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 6,000. \\ - 197.462 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 2.101 \\ - 1.898 \\ \hline \end{array}$$

a. 238.396

b. 5,802.538

c. 0.203

13. Subtract the following decimal numbers.

a.
$$\begin{array}{r} 1.00425 \\ - 0.32559 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 0.37 \\ - 0.2206 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 84.34475 \\ - 39.667 \\ \hline \end{array}$$

a. 0.67866

b. 0.1494

c. 44.67775

14. Subtract the following decimal numbers.

a.
$$\begin{array}{r} 207.011 \\ - 139.0125 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 5,000. \\ - 1,500.25 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 22.021 \\ - 6.45123 \\ \hline \end{array}$$

a. 67.9985

b. 3,499.75

c. 15.56977

15. Three boxes of pears weighing 32.4, 33.8 and 33.4 pounds were shipped. Compute the total weight.

$32.4 + 33.8 + 33.4 = 99.6$ pounds

16. An electrical contractor started the day with 284.2 feet of 10 gauge copper wire. He used 42.5 feet on one job and 114.8 feet on another job. How many feet of wire did he have at the end of the day?

$$42.5 + 114.8 = 157.3; 284.2 - 157.3 = 126.9 \text{ feet}$$

17. A restaurant had 18.6 pounds of pork on Wednesday morning and received 20.9 pounds Wednesday. On Thursday morning it had 9.8 pounds on hand. How many pounds did it use on Wednesday?

$$18.6 + 20.9 = 39.5 \text{ pounds}; 39.5 - 9.8 = 29.7 \text{ pounds}$$

18. A salesperson drives 74.9 miles on Monday, 59.8 on Tuesday, 65.5 on Wednesday, and 86.4 on Thursday. On Friday the salesperson stayed home. What was the total distance traveled last week?

$$74.9 + 59.8 + 65.5 + 86.4 = 286.6 \text{ miles}$$

19. A grocery store had 76.4 pounds of chicken in refrigeration on Friday morning. During the day, customers purchased 48.9 pounds, and 8.8 pounds were waste and thrown away. Calculate the number of pounds that were left on Friday night.

$$48.9 + 8.8 = 57.7 \text{ pounds gone}; 76.4 - 57.7 = 18.7 \text{ pounds remaining}$$

20. A production engineer wanted to know how long it should take to make metal rods with a lathe. Four rods were made, and the time was recorded. The results were 28.5 seconds, 29.2 seconds, 31.8 seconds, and 29.7 seconds. Compute the total time to make all four rods.

$$28.5 + 29.2 + 31.8 + 29.7 = 119.2 \text{ seconds}$$

21. A fresh produce wholesaler shipped 247.8 pounds of apples, 166.3 pounds of pears, and 109.7 pounds of plums to three small neighborhood grocery stores. What was the total weight of the fruit shipped?

$$247.8 + 166.3 + 109.7 = 523.8 \text{ pounds}$$

22. On April 12, a tax accountant took six tax returns to the post office. They weighed 4.2, 7.7, 8.5, 6.3 8.1, and 6.3 ounces. Determine the total weight in ounces.

$$4.2 + 7.7 + 8.5 + 6.3 + 8.1 + 6.3 = 41.1 \text{ ounces}$$

23. A pet store had \$468.42 cash on hand. It received cash payments of \$62.88 and \$59.14. It paid out \$56.50 to have the windows washed. Determine the amount of cash the pet store had left.

$$\$468.42 + \$62.88 + \$59.14 - \$56.50 = \$533.94$$

24. A pharmacy started the month with \$124.57 worth of dental floss. During the month, it received dental floss worth \$42.44 and sold dental floss worth \$89.95. Compute the value of the remaining dental floss.

$$\$124.57 + \$42.44 = \$167.01; \$167.01 - \$89.95 = \$77.06$$

25. A restaurant had \$356.87 cash on hand in the morning. Total cash receipts were \$873.45 from lunch and \$1,462.58 from dinner. The restaurant gave \$2,200 cash to a security service at closing time. What was the amount of cash on hand?

$$\$356.87 + \$873.45 + \$1,462.58 = \$2,692.90; \$2,692.90 - \$2,200.00 = \$492.90$$

26. A hardware store sells most kinds of nails by the pound. A contractor bought 6.8 pounds of roofing nails, 7.7 pounds of "10-penny" nails, and 8.2 pounds of "8-penny" nails. Compute the total pounds of nails that the contractor bought.

$$6.8 + 7.7 + 8.2 = 22.7 \text{ pounds}$$

27. A landscaping firm brought three trucks loaded with topsoil to a job site. Two trucks carried 7.75 cubic yards each, and one truck carried 5.25 cubic yards. When the job was finished, 3.5 cubic yards remained. Find the number of cubic yards used.

$$7.75 + 7.75 + 5.25 = 20.75 \text{ cu. yds.}; 20.75 - 3.50 = 17.25 \text{ cubic yards}$$

28. An office administrator finished word processing a two-page letter and its envelope in 13.8 minutes. He entered page one of the letter in 5.9 minutes and entered page two in 4.8 minutes. Compute the time that he spent printing the letter and preparing the envelope. (i.e., not entering the two pages of text).

$$5.9 + 4.8 = 10.7 \text{ minutes entering text}; 13.8 - 10.7 = 3.1 \text{ minutes printing and preparing the envelope or, } 13.8 - 5.9 - 4.8 = 3.1$$

29. To promote good employee health, the cafeteria at a corporation serves many fresh vegetables. It bought 21.4 pounds of celery, 33.2 pounds of carrots, 8.6 pounds of radishes, 12.8 pounds of broccoli, and 52.6 pounds of lettuce. What was the total weight of the vegetables purchased?

$$21.4 + 33.2 + 8.6 + 12.8 + 52.6 = 128.6 \text{ pounds}$$

30. When it opened on Monday morning, a local delicatessen had 26.8 pounds of salami. During the week, it received a shipment of 84.9 pounds of salami. Also during the week, it used 42.8 pounds of salami in sandwiches and sold 34.2 pounds in bulk to retail customers. How much salami remained at the end of the week?

$$26.8 + 84.9 - 42.8 - 34.2 = 34.7 \text{ pounds}$$

31. On Tuesday, a produce market sold 11.8 pounds of tangerines, 18.3 pounds of oranges and 12.5 pounds of grapefruit. On Saturday, it sold 19.4 pounds of tangerines, 31.7 pounds of oranges and 22.6 pounds of grapefruit. How many more pounds of these fruits did the market sell on Saturday than on Tuesday?

$$\begin{aligned} 11.8 + 18.3 + 12.5 &= 42.6 \text{ pounds sold on Tuesday} \\ 19.4 + 31.7 + 22.6 &= 73.7 \text{ pounds sold on Saturday} \\ 73.7 - 42.6 &= 31.1 \text{ more pounds sold on Saturday} \end{aligned}$$

32. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. 5.193×6.2

b. $\$4.87 \times 25.2$

c. 9.486×0.037

a. 32.1966

b. \$122.72

c. 0.350982

33. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. 326.3×1.065

b. $\$76.44 \times 6.7$

c. $\$25.65 \times 4.27$

a. 347.5095

b. \$512.15

c. \$109.53

34. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. $\$46.82 \times 14.1$

b. 0.625×0.25

c. $\$427.79 \times 8.7$

a. \$660.16

b. 0.15625

c. \$3,721.77

35. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. 31.402×6.55

b. $\$15.375 \times 600$

c. 16.54×3.93

a. 205.6831

b. \$9,225

c. 65.0022

36. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. 5.95×0.025

b. $\$45.83 \times 21.6$

c. 470.028×0.0906

a. 0.14875

b. \$989.93

c. 42.5845368

37. Multiply; round off monetary products to the nearest cent. Do not round off the non-monetary products.

a. $\$0.625 \times 8,000$

b. 4.7807×1.309

c. $\$27.35 \times 16.75$

a. \$5,000

b. 6.2579363

c. \$458.11

38. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

- a. $\$17.55 \div 7$ b. $13.115 \div 3.28$ c. $1.32 \div 0.16$

- a. $\$2.51$ b. 3.9985 c. 8.25

39. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

- a. $4.4868 \div 2.53$ b. $7.52 \div 0.45$ c. $\$154.75 \div 75$

- a. 1.7734 b. 16.7111 c. $\$2.06$

40. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

- a. $0.038 \div 0.007$ b. $\$358.88 \div 11.6$ c. $0.45409 \div 0.649$

- a. 5.4286 b. $\$30.94$ c. 0.6997

41. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

- a. $\$5.92 \div 0.25$ b. $\$1,524.50 \div 310$ c. $6.275 \div 13$

- a. $\$23.68$ b. $\$4.92$ c. 0.4827

42. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

- a. $\$72.63 \div 5.4$ b. $112.25 \div 8.27$ c. $\$306.03 \div 5.05$

- a. $\$13.45$ b. 13.5732 c. $\$60.60$

43. Divide; round off monetary quotients to the nearest cent; round non-monetary quotients to four decimal places.

- a. $12.6 \div 0.692$ b. $627.17 \div 1.7$ c. $\$12.25 \div 40$

- a. 18.2081 b. 368.9235 c. $\$0.31$

44. Solve the following multiplication and division problems by moving the decimal point to the right or left.

- a. $\$41.00 \div 100 = \underline{\hspace{2cm}}$

- b. $6.34 \text{ pints} \cdot 1,000 =$ _____
- c. $5,280 \text{ feet} \cdot 1,000 =$ _____
- d. $\$15.42 \cdot 10,000 =$ _____
- e. $7.47 \text{ yards} \cdot 100 =$ _____

- a. $\$0.41$
- b. $6,340 \text{ pints}$
- c. 5.28 feet
- d. $\$154,200$
- e. 747 yards

45. Solve the following multiplication and division problems by moving the decimal point to the right or left.

- a. $745.6 \text{ ounces} \cdot 1,000 =$ _____
- b. $\$47.50 \cdot 10 =$ _____
- c. $0.036 \text{ gallons} \cdot 10,000 =$ _____
- d. $\$71.50 \cdot 10 =$ _____
- e. $212.75 \text{ yards} \cdot 100 =$ _____

- a. 0.7456 ounces
- b. $\$475$
- c. 360 gallons
- d. $\$7.15$
- e. $21,275 \text{ yards}$

46. For each of the following multiplication and division problems, determine which estimate is most nearly correct.

- a. $0.391 \cdot 81.425$
A) 0.32
B) 3.2
C) 32
D) 320
- b. $0.0874 \cdot 0.0539$
A) 0.0045
B) 0.045
C) 0.45
D) 4.5
- c. $0.30667 \cdot 4.8508$
A) 0.15
B) 1.5
C) 15
D) 150
- d. $701.47 \cdot 19.15$
A) 0.35
B) 3.5
C) 35
D) 350
- e. $0.652 \cdot 0.816$
A) 0.08
B) 0.8
C) 8
D) 80
- f. $0.0000733 \cdot 0.0789$
A) 0.00009
B) 0.0009
C) 0.009
D) 0.09

- a. C) 32
- b. A) 0.0045
- c. B) 1.5
- d. C) 35
- e. B) 0.8
- f. B) 0.0009

47. David's Delicatessen sells macaroni salad for \$1.15 per half-pint. Using 1 quart = 2 pints, compute the cost of 4.25 quarts of macaroni salad. (Round to the nearest cent.)

$$\begin{aligned} \$1.15 \cdot 2 &= \$2.30 \text{ per pint}; 4.25 \text{ qts.} \cdot 2 \text{ pints per qt.} = 8.5 \text{ pints;} \\ 8.5 \text{ pints} \cdot \$2.30 &= \$19.55 \end{aligned}$$

48. Waterfront Restaurant sells "chili-to-go" for \$8.75 per quart. Using 1 gallon = 4 quarts, compute cost of 1.75 gallons of chili. (Round to the nearest cent.)

$$1.75 \text{ gal} \cdot 4 \text{ qt per gal} = 7 \text{ qt}; 7 \text{ qt} \cdot \$8.75 \text{ per qt} = \$61.25$$

49. Kathy Reynolds, a college student, works as a part-time retail clerk in a clothing store. Kathy can buy clothes at a discount and earns \$12.45 per hour. Compute her earnings for a week when she worked 17.25 hours. (Round to the nearest cent.)

$$\text{\$12.45 per hour} \times 17.25 \text{ hours} = \text{\$214.76}$$

50. High school student Kevin Parris worked after school for 3.8 hours on Wednesday and 4.25 hours on Friday. Calculate the amount that Kevin earned at \$8.65 per hour. (Round to the nearest cent.)

$$3.8 + 4.25 = 8.05 \text{ hours}; 8.05 \text{ hours} \times \text{\$8.65 per hour} = \text{\$69.63}$$

51. Eleanor Gunther earned \$102.60 for working 6.75 hours. What was Eleanor's rate of pay per hour? (Round to the nearest cent.)

$$\text{\$102.60} \div 6.75 \text{ hours} = \text{\$15.20 per hour}$$

52. Oswald Garden Service charges \$16.55 per hour per man for general yard maintenance, but charges \$22.75 per hour for cement work and tree removal. Compute their total charges for a job which took 9.8 man-hours of general yard maintenance work and 3.6 man-hours of tree removal. (Round to the nearest cent.)

$$9.8 \text{ hours} \times \text{\$16.55 per hour} = \text{\$162.19}; 3.6 \text{ hours} \times \text{\$22.75 per hour} = \text{\$81.90}; \\ \text{\$162.19} + \text{\$81.90} = \text{\$244.09}$$

53. Betsy's new car travels 36.4 miles on one gallon of gasoline. How far can her car go on 8.25 gallons of gasoline? (Round to the nearest tenth)

$$36.4 \text{ miles per gallon} \times 8.25 \text{ gallons} = 300.3 \text{ miles}$$

54. Oscar's new pickup truck travels 30.8 miles on one gallon of gasoline. Compute the gallons of gasoline that his truck would use on a 450-mile journey. (Round to the nearest tenth.)

$$450 \text{ miles} \div 30.8 \text{ miles per gallon} = 14.6 \text{ gallons}$$

55. The former owner of a used car told the new buyer that the car could travel for 36.4 miles on one gallon of gasoline. The buyer tested the car by driving it for 170 miles on 4.5 gallons of gasoline. Was this better or worse than the claim, and by how many miles per gallon? (Round to the nearest tenth.)

$$170 \text{ miles} \div 4.5 \text{ gallons} = 37.8 \text{ miles per gallon}; \\ 37.8 - 36.4 = 1.4 \text{ miles per gallon better}$$

56. In the winter, imported red bell peppers sell for \$4.99 per pound. What is the total price of six red peppers which have a combined weight of 3.16 pounds? (Round to the nearest cent.)

$$\text{\$4.99} \times 3.16 \text{ pounds} = \text{\$15.77}$$

57. An automobile repair facility recently purchased a 200-foot roll of flexible plastic tubing for \$48.25. Compute the cost in cents per foot. (Round to the nearest cent.)

$$\text{\$48.25} \div 200 \text{ feet} = \text{\$0.24125, or 24 cents per foot}$$

58. A hardware store sells rubber tubing by the foot. If a seventy-five-foot roll of tubing eventually sells for a total of \$54, how much did the store charge per foot? (Round to the nearest cent.)

$\$54 \div 75 \text{ feet} = \0.72 , or 72 cents per foot

59. Bill Pierson buys a 125-foot roll of latex tubing for \$35. Bill cuts the tubing into shorter pieces and resells all of it for a total of \$57.50. Compute Bill's profit per foot. (Round to the nearest cent.)

$\$57.50 - \$35 = \$22.50$ total profit; $\$22.50 \div 125 \text{ feet} = \0.18 profit per foot
or, $\$57.50 \div 125 \text{ feet} = \0.46 revenue per foot; $\$35 \div 125 \text{ feet} = \0.28 cost per foot;
 $\$0.46 - \$0.28 = \$0.18$ profit per foot

60. A certain cut of beef costs \$7.59 per pound, and a similar cut of pork costs \$5.19 per pound. What is the total cost of 3.25 pounds of the beef and 3.75 pounds of the pork? (Round to the nearest cent.)

$3.25 \text{ pounds} \times \$7.59 \text{ per pound} = \24.67 for the beef
 $3.75 \text{ pounds} \times \$5.19 \text{ per pound} = \19.46 for the pork
 $\$24.67 + \$19.46 = \$44.13$ total

61. A warehouse store sells a package of 125 steel washers for \$2.75. What is the price per washer when they are purchased in this package? (Find the price to the nearest tenth of a cent.)

$\$2.75 \div 125 = \0.022 or 2.2 cents per washer.

62. The wholesale price of a plastic irrigation bubbler is 25 cents. How many plastic bubblers can be purchased for \$165? (Round to the nearest whole number.)

$\$165 \div 25 \text{ cents} = \$165 \div \$0.25 = 660$ bubblers

63. Rubber washers are sold for 37.5 cents per dozen, wholesale. Compute the amount that will be charged for 480 dozen washers. (Round to the nearest dollar.)

$480 \times 37.5 \text{ cents} = 480 \times \$0.375 = \$180$

64. Large aluminum tubing costs \$1.27 per foot. At that price, what will be the total cost of 1,500 feet of the tubing? (Round to the nearest dollar.)

$1,500 \times \$1.27 = \$1,905$

65. Julian's City Hardware store sells single strand 12-gauge copper electrical wire at 18 cents per foot. The same wire also comes in a 250-foot roll for \$37.49 a roll. At the 18 cents per foot price, how many feet would the customer be able to purchase for \$37.49? (Round to the nearest tenth.)

$\$37.49 \div \$0.18 \text{ per foot} = 208.3$ feet

66. Seaside Fish Market sells halibut for \$16.49 per pound and red snapper for \$11.69 per pound. What is the total cost of 1.55 pounds of halibut and 2.77 pounds of red snapper? (Round to the nearest cent.)

$1.55 \text{ pounds} \times \$16.49 \text{ per pound} = \25.56 for the halibut
 $2.77 \text{ pounds} \times \$11.69 \text{ per pound} = \32.38 for the red snapper
 $\$25.56 + \$32.38 = \$57.94$ total

67. Dave Miles earns \$10.60 per hour working in a restaurant on weekdays. If Dave works at least 30 hours during the week on weekdays, then he earns \$15.90 per hour on the following Saturday. How much would Dave earn during a week in which he worked 36.25 hours during a week and 7.5 additional hours on the following Saturday? (Round to the nearest cent.)

36.25 hours \times \$10.60 per hour = \$384.25 during the week

7.5 hours \times \$15.90 per hour = \$119.25 on Saturday

\$384.25 + \$119.25 = \$503.50 total