

Chapter 1 Introduction - Some Background Basics

Student: _____

1. Every map projection has some degree of distortion because
 - A. a curved surface cannot be represented on a flat surface without distortion.
 - B. parallels and meridians never cross at right angles on a globe.
 - C. the grid of latitude and longitude cannot be accurately measured.
 - D. a sphere is a developable surface.
2. All regions have the following characteristics EXCEPT
 - A. relative location.
 - B. derived location.
 - C. spatial extent.
 - D. boundaries.
3. A street address is an example of
 - A. relative position.
 - B. prime position.
 - C. absolute location.
 - D. situation.
4. Which of the following statements about latitude is NOT true?
 - A. Latitude is a measure of distance north and south of the equator.
 - B. Latitude lines are always parallel to each other.
 - C. Latitude is always written as some number between 0 degrees and 180 degrees.
 - D. On a globe, lines of latitude intersect meridians of longitude at right angles.
5. Which of the following is NOT a type of quantitative thematic map?
 - A. isometric map
 - B. choropleth map
 - C. topographic map
 - D. cartogram
6. The location of a place described by its local physical characteristics is called its
 - A. relative position.
 - B. site.
 - C. normative locale.
 - D. situation.
7. A contour is an isoline showing
 - A. points of equal elevation.
 - B. points equidistant from a known, central location.

- C. average value of an item studied per unit area of its occurrence.
- D. the degree of small area distortion on thematic maps.

8. Which of the following is NOT true about the globe grid?

- A. All meridians are one-half the length of the equator.
- B. Meridians and parallels intersect at right angles.
- C. Parallels increase in length as one nears the poles.
- D. The scale on the surface of the globe is the same in every direction.

9. Which of the following is NOT a characteristic of regions?

- A. hierarchical arrangement
- B. spatial extent
- C. historical sequence
- D. defined boundaries

10. Density and dispersion are independent statements about the location of things within a defined area. They are different in that

- A. density is the number of items in the area and dispersion describes their proximity.
- B. dispersion reports the mobility or changeability of items in an area and density reports their degree of permanence.
- C. density is a perceived relationship of things in space and dispersion is the mathematical relationship of spatial data.
- D. dispersion is a spatial statement valid for functional regions and density has meaning only for formal regions.

11. The elements common to all spatial distributions are

- A. site, situation, and localization.
- B. accessibility, connectivity, and pattern.
- C. concentration, dissonance, and connectivity.
- D. density, dispersion, and pattern.

12. Perceptual regions

- A. reflect personal or popular impressions of territory and spatial divisions.
- B. are perceived through the application of well-defined spatial criteria.
- C. have boundaries of clearly visible, self-evident physical or cultural change.
- D. have meaning only in physical geography, which deals with perceivable objects.

13. An isoline on a map

- A. measures the concentration of the mapped item.
- B. measures dispersion of the mapped item.
- C. connects points of equal value to the mapped item.
- D. outlines the area of the map with no globe grid distortion.

14. Which one of the following correctly lists the four main properties of maps?

- A. area, direction, latitude, longitude

- B. equivalence, shape, latitude, longitude
- C. conformality, equivalence, direction, symbols
- D. area, shape, distance, direction

15. All of the following are key reference points in the grid system EXCEPT the

- A. North and South Poles.
- B. polar circumference.
- C. equator.
- D. prime meridian.

16. Map scale defines the

- A. type of region that can be depicted by a dot or line.
- B. relationship between the size of an earth feature and its size on the map.
- C. line pattern used by cartographers to draw boundaries.
- D. the angle between degrees of latitude and longitude shown on the map.

17. A GIS database

- A. is usually presented as a descriptive article or gazetteer entry.
- B. contains digitized place-specific information.
- C. is a randomly accessible set of descriptive place-specific photographs.
- D. is the raw information needed to coordinate airline routes and schedules.

18. A functional or nodal region is defined by

- A. internal patterns of interaction and connection.
- B. significant topographic change at its margins.
- C. the characteristics assigned to it by the government.
- D. the physical or cultural characteristic common throughout.

19. The situation of a place

- A. remains constant and defined by the globe grid.
- B. remains constant and is controlled by environmental forces.
- C. can change over time as external relations of the place change.
- D. can change over time as the globe grid is adjusted.

20. Geography as a discipline

- A. originated in ancient Greek interest in the physical structure of the earth and in the nature and activities of different people.
- B. developed as an outgrowth of the "Age of Discovery" beginning in the 15th century.
- C. developed out of a tradition of cave painting and story telling.
- D. was developed in response to a national need to map and describe the American West.

21. The physical attributes of a place

- A. represent the current state of continuing processes of change and development.
- B. are determined by natural processes and remain unchanged over time.

- C. determine the resource endowments of that place and thus also determine the cultural attributes of its inhabitants.
- D. are the active agents in the continual interplay of environmental and cultural forces.

22. Absolute location

- A. describes a place in terms of its real-world circumstances.
- B. is a temporary and changing characteristic of place.
- C. cannot be defined with precision in a world of relative spatial relationships.
- D. is a precise position on the surface of the globe.

23. The raster approach to GIS data presentation

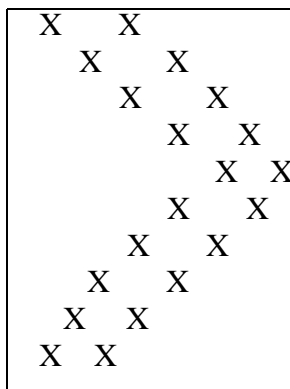
- A. presents data that are specific to the precise location of each object.
- B. describes data stemming from a cell of the partitioned area under study.
- C. is the process of detecting the nature of an object from a far distance.
- D. creates a list, or roster, of data points to be presented on a map.

24. You have to get across town before rush hour. You plan your route based upon your expectations of traffic. Your plan is referred to as

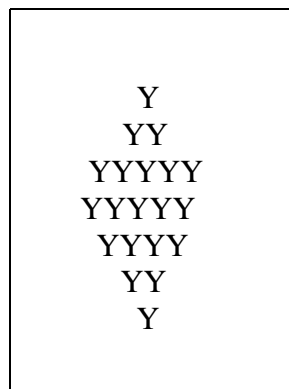
- A. a relative location.
- B. a pattern.
- C. a mental map.
- D. an isometric map.

25. The US federal government is proposing a new interstate highway between Charleston, WV and Knoxville, TN. Which of the following would occur if this interstate is completed?

- A. Accessibility and connectivity will decrease between the cities.
- B. Accessibility will increase but connectivity will decrease between the cities.
- C. Accessibility will decrease but connectivity will increase between the cities.
- D. Accessibility and connectivity will increase between the cities.



(X)



(Y)

26. Look at the diagrams above. Which of the following is true?

- A. The observations with regions X and Y are equivalently dispersed.
- B. Region X indicates a linear density while region Y exhibits a central density.
- C. Region X has a linear pattern and region Y has a centralized density.
- D. The density of observations within each region are equal.

27. You are new in town and have asked a person on the street, "How do I get to the local employment office?" Which of the following responses includes relative distance and relative direction?
- A. Go to the church ahead. You'll see a white building. At the street after the white building make a left and you'll see the national bank. The employment office is in the basement of the building across from the bank.
 - B. You can get there in 5 minutes by taxi. It is located at 40°48' North 75°16' West.
 - C. Walking from here will take you 12-15 minutes. First go to St Augustine's ahead, turn right and you'll see a bright white building. Go to that building and make a left and walk to the National Bank. It is across the street from the bank.
 - D. The employment office is located at 4596 Jones Street. It is 1.25 miles from here. Go North on Smith drive, turn right onto Roberts Street and then left onto Jones.
28. Demography is most closely associated with Human Geography, a subdivision of Social Geography.
True False
29. The term geography is derived from the Greek words "*geo*" meaning the earth and "*graphein*" meaning to write.
True False
30. The term "projection" designates the method chosen to depict the earth's curvature on a flat surface.
True False
31. The boundaries of functional regions are frequently impermanent and changeable.
True False
32. Regions are natural entities that exist independently of human perception.
True False
33. A map scale is the ratio between distance on the map and distance on the ground.
True False
34. To be useful, a defined region must be based upon all the physical and cultural features within its boundaries.
True False
35. A thematic map displays a single category of data or a specific spatial distribution.
True False
36. A model is a simplified abstraction of reality.
True False
37. Globalization refers only to the spread of economic systems around the world.

True False

38. Since geography deals with existing physical and cultural landscapes and regions, it deliberately avoids consideration of past conditions.

True False

39. One goal of geography is to define and analyze regions.

True False

40. Perceptual regions require more precise delimitation than do formal or functional regions.

True False

41. Regions focus upon spatial uniformities.

True False

42. Functional regions are defined by established, usually physical boundaries.

True False

43. The smaller the scale of a map, the larger the earth area it displays.

True False

44. Geography may be described as the study of spatial variation.

True False

45. Latitude is measured in relation to the Prime Meridian.

True False

46. Because geographers deal with patterns of spatial interaction that remain constant, scale is not important.

True False

47. Absolute location is determined by reference to an agreed-on system of coordinates.

True False

48. Following a contour line would lead you on the shortest path between two elevations.

True False

49. Because maps present locational or statistical data, their content is always verifiable and scientifically valid.

True False

50. We can use mental maps to organize our spatial activities and to choose our routes of travel.

True False

51. Scale implies the degree of generalization permissible or supportable.

True False

52. The term "cultural landscape" suggests the impact of human activity on the natural environment.

True False

53. For geographers, the terms "space" and "place" are synonymous.

True False

54. Remote sensing is limited to images collected by satellites.

True False

55. Describe the properties of the globe grid and define its key reference points. Draw and label carefully a diagram that illustrates your discussion.

56. Discuss the common, shared elements of regions as defined by geographers.

57. Define and contrast "absolute location" and "relative location" using examples to illustrate each term.

58. Compare and contrast the three types of regions identified in Chapter 1.

- a. situation
- b. connectivity
- c. spatial interactions
- d. density
- e. dispersion

59. Choose the term that matches the definition provided:
The movement of people and things between places.

60. Choose the term that matches the definition provided:
The relative location of a place or activity.

61. Choose the term that matches the definition provided:
The paths and ways in which different places are linked.

62. Choose the term that matches the definition provided:
The amount of spread of an item over an area.

63. Choose the term that matches the definition provided:
The quantity of an item within a unit area.

Chapter 1 Introduction - Some Background Basics

1. A
2. B
3. C
4. C
5. C
6. B
7. A
8. C
9. C
10. A
11. D
12. A
13. C
14. D
15. B
16. B
17. B
18. A
19. C
20. A
21. A
22. D
23. B
24. C
25. D
26. D
27. C
28. FALSE
29. TRUE
30. TRUE
31. TRUE
32. FALSE
33. TRUE
34. FALSE
35. TRUE
36. TRUE
37. FALSE
38. FALSE
39. TRUE
40. FALSE
41. TRUE
42. FALSE
43. TRUE
44. TRUE
45. FALSE
46. FALSE

- 47. TRUE
- 48. FALSE
- 49. FALSE
- 50. TRUE
- 51. TRUE
- 52. TRUE
- 53. FALSE
- 54. FALSE
- 55. Meridians are north-south lines of equal length, converging at the poles; each is one-half the length of the equator. Lines of latitude (parallels) are parallel to the equator and to each other; they decrease in length pole ward from the equator. Meridians and parallels intersect at right angles. Global scale is constant.
- 56. Regions have (1) relative and absolute location, (2) spatial extent, (3) internal integration or uniformity in the feature or features defining the region, (4) boundaries that are based on the outer limits of that uniformity or integration, (5) a position as one possible spatial summary in a hierarchy of regions.
- 57. Absolute location is precise position as measured by a mathematically or geometrically based reference system. Examples: latitude and longitude; city street address; legal property description. Relative location is spatial relationship of place and other connected places. Example: New York and Hudson Valley route and overseas connections.
- 58. Formal (or uniform) regions are areas of essential uniformity in one or a limited combination of physical and cultural features. Functional (or nodal) regions are dynamic organizational spatial systems defined by interactions and exchanges. Perceptual regions are informally defined areas reflecting the ways individuals and groups view spatial subdivisions meaningful in their own lives.
- 59. C
- 60. A
- 61. B
- 62. E
- 63. D