Chapter 02 Test Bank: Techniques of Geographic Analysis Key

1. Every 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 system is two-dimensional but the earth is three-dimensional.
D. a sphere is a developable surface.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

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

A. North and South Poles.
B. Greenwich Village, New York.
C. equator.
D. prime meridian.

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Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

3. 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

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Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

4. All of the following statements about small-scale maps are true EXCEPT that they

A. give a general idea of the relative locations of major features.
B. show significantly less detail than do larger scale maps.
C. typically smooth out such features as coastlines and rivers.
D. permit the accurate measurement of major features.

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Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.04 Scale
Topic: Understanding Map Projections

5. Which of the following features is NOT commonly found on topographic maps?

A. elevation contours
B. rivers, lakes, and coastal features
C. cultural features such as buildings, orchards, cities, and roads
D. proportional circle symbols depicting population distribution

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

6. Which of the following statements about remote sensing is NOT true?

A. It is a faster means of reconnaissance than ground surveying.
B. It began with data collected by the United States space program.
C. One of the most common sources of remotely sensed data is Landsat imagery.
D. Aerial photographs must be interpreted before maps can be made of them.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

7. Which of the following is NOT a way to show a quantity at a point on a map?

A. dots
B. three-dimensional symbols
C. proportional circles
D. pixels

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

8. Which of the following is the largest scale map?

A. 1: 8,000
B. 1: 24,000
C. 1: 50,000
D. 1: 63,360

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.04 Scale
Topic: Understanding Map Projections

9. Probably the most often misused projection is

A. Goode's Homolosine.
B. simple conic.
C. gnomonic.
D. Mercator.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

10. Which of the following statements about latitude is true?

A. Latitude is a measure of distance and of the equator.
B. Latitude lines are always parallel to each other on a globe.
C. Latitude varies from 0° to 180°.
D. On a globe, lines of latitude intersect parallels of longitude at right angles.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

11. A contour interval

A. is the vertical spacing between contour lines.
B. connects points of equal elevation above sea level.
C. is a single map in a topographic series.
D. heightens the graphic effect of a topographic map.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

12. A map drawn at which of the following scales would provide the greatest level of detail?

A. 1: 8,000
B. 1: 24,000
C. 1: 50,000
D. 1: 63,360

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.04 Scale
Topic: Understanding Map Projections

13. The prime meridian

A. passes through Greenwich Village, New York.
B. is given in nature.
C. connects the North and South Poles.
D. is parallel to the equator.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

14. A map scale of 1: 24,000 means that

A. one inch on the map represents 2,000 feet on the earth.
B. one inch on the map represents 24,000 inches on the earth.
C. one foot on the map represents 2,000 inches on the earth.
D. one foot on the map represents 24,000 miles on the earth.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.04 Scale
Topic: Understanding Map Projections

15. Which of the following statements about topographic maps is NOT correct?

A. They are used by engineers, regional planners, and land use analysts.
B. The contour line is the principal device used to indicate elevation.
C. They portray the terrain rather than features people have added to the natural landscape.
D. Aerial photography is employed to speed up the production process.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

16. An equidistant projection

A. shows true distance in all directions from one or two central points.
B. has parallels and meridians intersecting at right angles.
C. shows true directions from a single point to all other points.
D. is almost always conformal.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

17. Under the survey system established by the Land Ordinance of 1785, land is divided into

A. metes and bounds.
B. base lines and meridians.
C. townships and sections.
D. acres and hectares.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

18. Which of the following variables would NOT be suitable for depiction on a flow-line map?

A. the amount oil flowing through a network of pipelines
B. the number of immigrants who have come from different regions of the world to the U.S.
C. the number of immigrants living in each region of the U.S.
D. the average amount of water flowing in the major rivers of the U.S.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

19. A digital record of geographic information is called a

A. geographic database.
B. density slice.
C. pixel.
D. vertical axis.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.07 GIS
Topic: Geographic Information System

20. Which of the following is NOT a globe property?

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

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

21. Given a map scale of 1: 63,360, how many inches on the map would be needed to represent 2 miles on the ground?

A. 2 inches
B. 4 inches
C. 8 inches
D. 12 inches

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.04 Scale
Topic: Understanding Map Projections

22. All of the following are problems inherent in showing quantities in areas EXCEPT that

A. such maps imply uniformity within an area.
B. such maps imply abrupt changes at boundaries that are unrealistic.
C. color choice may impart more importance to some areas than to others.
D. such maps can show quantities but not rates, percentages, or densities.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

23. Contour lines

A. can be detected by remote sensing.
B. connect points of equal elevation above sea level.
C. aren't useful for depicting mountainous regions.
D. are less accurate than shaded relief in depicting terrain.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

24. Thermal scanners are characterized by all of the following EXCEPT that they

A. sense the heat emitted by objects on earth.
B. can operate only in the daytime.
C. have been used to detect water pollution.
D. do not use photographic film.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

25. Which of the following statements about longitude is correct?

A. Values of longitude range from 0° to 360° degrees.
B. Meridians decrease in length away from the International Date Line.
C. Distance between adjacent degrees of longitude increases away from the equator.
D. It is the angular distance east or west of the prime meridian.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

26. The federal agency that makes most of the topographic maps in the United States is

A. USDOT.
B. USGS.
C. NASA.
D. BLM.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

27. A map on which one square inch represents an identical number of square miles anywhere on the map is called

A. equidistant.
B. conformal.
C. azimuthal.
D. equivalent.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

28. A map that accurately portrays the shapes of small areas is called

A. conformal.
B. graphic.
C. equivalent.
D. compromise.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

29. When mapping numerical data, a cartographer should use a projection that is

A. conformal.
B. topographic.
C. equidistant.
D. equal-area.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

30. An example of a map that is a compromise between an equal-area and conformal projection is

A. the sinusoidal projection.
B. the Mercator projection.
C. the Robinson projection.
D. a satellite image.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

31. Maps that adjust the size of area units based on the values of the data they depict are called

A. choropleth maps.
B. topographic maps.
C. flow-line maps.
D. cartogram maps.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

32. Which of the following is NOT one of the five major components of a geographic information system?

A. geographic database
B. pixel
C. computer hardware
D. computer software

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.07 GIS
Topic: Geographic Information System

33. When one travels one fourth of the distance around the world along the same parallel of latitude, the number of time zones traversed is likely

A. 4.
B. 6.
C. 12.
D. 24.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

34. Meridians of longitude converge at the

A. equator.
B. poles.
C. International Date Line.
D. Line of Greenwich.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

35. An example of a choropleth map would be a map showing

A. dots, each depicting 1,000 acres of corn production.
B. the location of schools in a census tract.
C. population density by county.
D. proportional circles depicting the population of selected cities.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

36. If it is 5 p.m. at the Royal Observatory in Greenwich, England, what time is it at 45° E longitude?

A. 2 p.m.
B. 8 p.m.
C. 1 a.m.
D. 11 p.m.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

37. What is the representative fraction scale of a map in which one inch represents one half of a mile on the ground?

A. 1: 31,680
B. 1: 15,840
C. 1: 10,560
D. 1: 2,640

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.04 Scale
Topic: Understanding Map Projections

38. Which one of the following sets of coordinates corresponds to a place on the earth?

A. 57ºN, 193ºE
B. 105ºN, 126ºW
C. 180ºN
D. 34ºN, 84ºW

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

39. The Land Ordinance of 1785 established a systematic survey known as the

A. base line system.
B. township and range system.
C. orthographic survey system.
D. public lands identification system.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

40. The projection used during the Cold War to exaggerate the Communist threat by distorting the areas of countries at high latitudes

A. cartogram.
B. the Robinson projection.
C. Goode's Homolosine projection.
D. the Mercator projection.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

41. The most appropriate contour interval for a relatively flat area is

A. 5 feet.
B. 50 feet.
C. 100 feet.
D. 1,000 feet.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

42. As one crosses the International Date Line going westward, the calendar day should be moved

A. back one day.
B. ahead one day.
C. ahead twelve hours.
D. back twelve hours.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

43. A geographic information system (GIS) is primarily based on the use of

A. the electromagnetic spectrum.
B. remote sensing.
C. a computer.
D. a thermal scanner.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.07 GIS
Topic: Geographic Information System

44. Which of the following are lines of constant value?

A. cartograms
B. isolines
C. GPS lines
D. projection lines

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

45. What is the angle of intersection of all parallels and meridians on the earth?
A. 30%
B. 45%
C. 60%
D. 90%

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

46. Which of the following is not a thematic map type?

A. choropleth map
B. cartogram map
C. proportional symbol map
D. topographic map

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

47. A geographic information system contains

A. A data input component and a data management component
B. Data manipulation functions and terrain manuals
C. Genomes and output components
D. A data analysis function and a periodic table

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Geographic Information System

48. The U.S. network of bronze markers which indicate latitude, longitude, and elevation are called

A. The Global Positioning System
B. The red states/blue states
C. Bench marks
D. Geographical Information Systems

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

49. The Peters projection falls into which category of map

A. Equal-area
B. Conformal
C. Equidistant
D. Thematic

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

50. The International Date Line generally follows the 49th parallel.

FALSE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

51. No projection can provide correct shapes for large areas.

TRUE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

52. The art and science of map-making is called cartography.

TRUE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

53. The steeper the slope, the closer together the contour lines rendering that slope.

TRUE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

54. No map projection can depict shapes and areas as accurately as the globe.

TRUE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

55. For as long as geographers have made maps, the prime meridian has always gone through Greenwich, England.

FALSE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

56. A false-color image is one on which colors do not appear natural.

TRUE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

57. The Peters projection attempts to promote social justice by showing the true areas of developing countries.

TRUE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

58. A map scale is the ratio between distance on the map and distance on the ground.

TRUE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.04 Scale
Topic: Understanding Map Projections

59. Geographic information systems are used in physical geography, but not in human geography.

FALSE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.07 GIS
Topic: Geographic Information System

60. Because maps are factual, they can never distort the truth.

FALSE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

61. The contour intervals are much greater for flatter surfaces than for mountainous and steeper slopes.

FALSE

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

62. The 24 time zones of the world are roughly centered on meridians at 15-degree intervals.

TRUE

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

63. The United States is the only country with satellites collecting remotely sensed data on the earth.

FALSE

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

64. What is the name of the parallel from which latitude is measured?

Equator

Bloom's Level: 1. Remember
Gradable: manual
Section: 02.02 Locating Points on a Sphere
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65. What are the lines of constant elevation on topographic maps called?

Contour lines

Bloom's Level: 1. Remember
Gradable: manual
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

66. What are some of the applications of geographic information systems?
Answer varies. Examples include biologists mapping endangered species, ecologists mapping water pollution, epidemiologists mapping diseases, political scientists drawing up boundaries for legislative districts, and sociologists identifying clusters of

segregation.

Bloom's Level: 2. Understand
Gradable: manual
Section: 02.07 GIS
Topic: Geographic Information System

67. What is the general term referring to collecting information about the earth using devices as aerial photography, radar, and thermal scanners?

Remote sensing

Bloom's Level: 1. Remember
Gradable: manual
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

68. Discuss the concepts involved in the formation of the earth's grid system. Draw and carefully label a diagram that aids your explanation.

Need grid system to describe locations of points on a sphere. Key reference points are the poles, equator, and prime meridian. Students should define these, label them on a diagram, and indicate that latitude measures distance north and south of equator and longitude the distance east or west of the prime meridian.

Bloom's Level: 2. Understand
Gradable: manual
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

69. Discuss the concept of remote sensing. What techniques are currently used in this field? Why is remote sensing useful?

Techniques include: (a) aerial photography with returned film,
(b) nonphotographic imagery (e.g., thermal scanners and radar), and
(c) satellite imagery.
Advantages: accuracy, speed, completeness of coverage, views of large regions, mapping the invisible, and practical applications (e.g., storm monitoring).

Bloom's Level: 2. Understand
Gradable: manual
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

70. What are the trade-offs in choosing between equivalent, conformal, and equidistant map projections for small-scale display maps?

An equal area map should be used for maps showing a real extent of a phenomenon; however equal area maps are not conformal and are not equidistant.

Bloom's Level: 2. Understand
Gradable: manual
Section: 02.03 Map Projections
Topic: Understanding Map Projections

71. Which of the following scale is best representative of a small-scale map?

A. 1 inch to 1 mile
B. 1:1,000,000
C. 1:63,360
D. 1:24,000

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.04 Scale
Topic: Types of Maps and Map Symbols

72. A map in which the area of its units has been distorted to be proportional to the data they represent is known as

A. a cartogram.
B. equal area.
C. proportional symbol.
D. topographic.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

73. With respect to U.S. Geological Survey Topographic Maps

A. contour intervals are used to measure the scale of the map.
B. the 1:24,000 series is complete for the contiguous United States and Hawaii.
C. they do not display human or cultural features.
D. they were designed for military purposes.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
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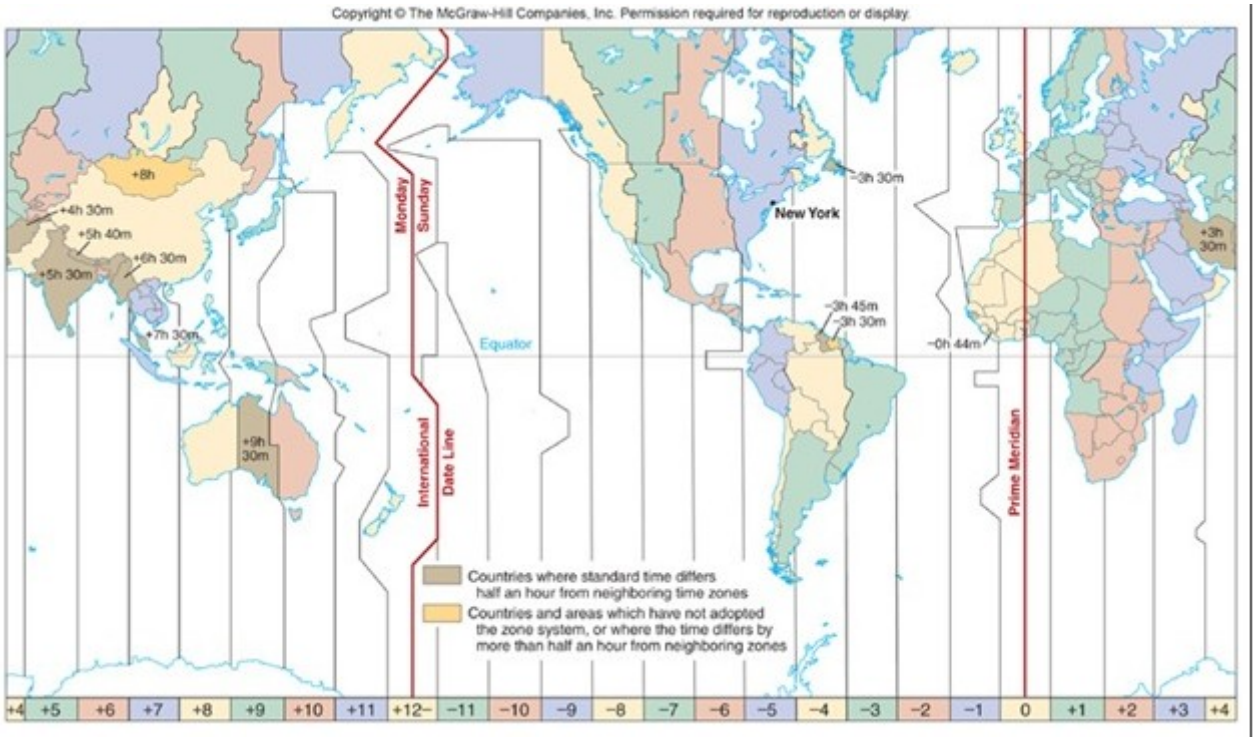
74. Using Figure 2.2 or any map of world time zones, when it is noon in New York City, what time of day is it in Tokyo, Japan?



A. 2:00 AM the same day
B. 9:00 PM the same day
C. 2:00 AM the next day
D. 9:00 PM the next day

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

75. The term remote sensing refers to the

A. calculation of the precise location of all one million plus U.S.G.S. benchmarks.
B. construction of maps by computers.
C. detection of the nature of objects from a distance.
D. wavelengths of the electromagnetic spectrum.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

76. Water pollution, such as the amount of sediment, may be detected using which of the following?

A. Astrological images
B. Orthophoto images
C. Topographic images
D. Thermal Satellite scanners

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

77. The distance between each degree of latitude is approximately

A. 33 miles.
B. 50 miles.
C. 69 miles.
D. 111 miles.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

78. Which of the following properties of a globe is is not correct?

A. All lines of latitude are parallel to the equator and to each other
B. All meridians converge at the poles and are true north-south lines
C. Meridians and parallels intersect at right angles
D. Due to the slight flattening of the earth in polar regions, parallels increase in length as one nears the poles

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

79. A half circle of 180 degrees of arc which connects the earth's poles is known as a

A. latitude.
B. meridian.
C. longitude.
D. parallel.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
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80. The system of angular measurement for specifying a location distance north or south of the equator is known as

A. latitude.
B. longitude.
C. parallel.
D. meridian.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
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81. Which statement is true about GPS technology?

A. GPS uses remote sensing
B. GPS is a navigational device
C. GPS involves infrared photography
D. GPS gives relative location of places

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

82. To increase precision, latitude and longitude are divided into

A. meters and centimeters.
B. minutes and seconds.
C. latimites and longimites.
D. meridians.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

83. The contour interval represents the

A. accuracy of the surveying work.
B. horizontal spacing between the contour lines.
C. number of contour lines on a map.
D. vertical spacing between contour lines.

Accessibility: Keyboard Navigation
Gradable: automatic

84. Which of the following is not a map projection?

A. Equidistant
B. Geoidal
C. Conformal
D. Azimuthal

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

85. Each time zone extends across approximately how many degrees of longitude?

A. 15
B. 50
C. 69
D. 111

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

86. Geographic information systems

A. digitize data from many different sources in order to display any combination of variables for map analysis.
B. are limited to military and homeland defense applications.
C. emphasize the use of the map as a means of information storage.
D. can only display information from government data.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.07 GIS
Topic: Geographic Information System

87. If a map is called conformal, then it is in terms of

A. area.
B. shape.
C. distance.
D. direction.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

88. A large-scale map depicts

A. a large amount of detail for a large amount of area.
B. a large amount of detail for a small amount of area.
C. a small amount of detail for a large amount of area.
D. a small amount of detail for a small amount of area.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.04 Scale
Topic: Types of Maps and Map Symbols

89. What is the principal device to show elevation on a topographic map?

A. Benchmarks
B. Spot heights
C. Shaded relief
D. Contour lines

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

90. The map type best used to record not only the presence of a phenomenon but to suggest a visual impression of the pattern is

A. dot.
B. choropleth.
C. linear.
D. cartogram.

Accessibility: Keyboard Navigation
Bloom's Level: 2. Understand
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

91. Flowlines would not be used to represent

A. airline routes.
B. political boundaries.
C. migration patterns.
D. ocean currents.

Accessibility: Keyboard Navigation
Bloom's Level: 2. Understand
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

92. False colored maps are produced by

A. thermal scanners.
B. radar.
C. infrared film.
D. standard photographic film.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

93. A choropleth map and a cartogram are both examples of the portrayal of geographic information based on

A. point symbols.
B. national symbols.
C. line symbols.
D. area symbols.

Accessibility: Keyboard Navigation
Bloom's Level: 2. Understand
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

94. The Global Positioning System is maintained by the

A. United Nations.
B. US Department of Defense.
C. US Geological Survey.
D. automotive industry.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

95. The Prime Meridian runs through the Royal Observatory at

A. New York City, New York.
B. Quito, Ecuador.
C. Greenwich, England.
D. Pacific Ocean.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

96. Which of the following are latitude and longitude coordinates?

A. 110 degrees North, 78 degrees East
B. 110 degrees South, 78 degrees North
C. 45 degrees South, 120 degrees East
D. 60 degrees South, 123 degrees North

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

97. Which type of map projection shows true directions from one central point to all other points?

A. Equivalent
B. Conformal
C. Equidistant
D. Azimuthal

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

98. What kind of map shows a specific spatial distribution or category of data?

A. Thematic map
B. Reference map
C. General-purpose map
D. Location map

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

99. Which statement is not correct regarding Landsat satellites?

A. The first Landsat satellite was launched in 1972
B. Landsat data may be used for both long-term scientific research as well as immediate monitoring and mapping
C. Landsat satellites are capable of resolving objects between 50 and 200 feet in size
D. Landsat's sensors can depict objects up to 15 meters (50 feet) below the ground

Accessibility: Keyboard Navigation
Bloom's Level: 2. Understand
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

100. What term refers to the art, science and technology of making maps?

A. Geography
B. Geographical Information Systems
C. Cartography
D. Topography

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.01 Maps as Tools
Topic: Locating Places using Longitude and Latitude

101. Which of the following representative fractions would show the most detail on a map?

A. 1:1,000,000
B. 1:24,000
C. 1:63,360
D. 1:10,000,000

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.04 Scale
Topic: Types of Maps and Map Symbols

102. What type of map symbol do contour lines represent?

A. Isoline
B. Point
C. Area
D. Flow line

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

103. The statement "1 inch to 1 mile" is an example of what type of scale?

A. Metric
B. Verbal
C. Graphic
D. Representative fraction

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.04 Scale
Topic: Types of Maps and Map Symbols

104. The line that encircles the globe halfway between the poles, perpendicular to the axis, is the

A. prime meridian.
B. international date line.
C. equator.
D. tropic of cancer.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

105. Based on survey lines oriented in the cardinal directions, the Land Ordinance of 1785 established a systematic survey known as

A. long lot.
B. metes and bounds.
C. township and range.
D. state plane.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

106. Which of the following correctly lists the four main globe properties that may be distorted in flat maps?

A. Area, direction, latitude, longitude
B. Area, shape, distance, direction
C. Conformality, equivalence, direction, symbology
D. Graphics mercator, charts, themes

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

107. The ratio between the measurement of something on the map and the corresponding measurement on the earth is known as

A. distance.
B. direction.
C. projection.
D. scale.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.04 Scale
Topic: Types of Maps and Map Symbols

108. A map scale of 1:63,360 means that

A. one inch on the map represents 63,360 miles on the earth.
B. one inch on the map represents 63,360 inches on the earth.
C. one inch on the map represents 63,360 feet on the earth.
D. one foot on the map represents 63,360 inches on the earth.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.04 Scale
Topic: Types of Maps and Map Symbols

109. General purpose maps that depict the shape and elevation of terrain, and usually portray the surface features of relatively small areas, are known as

A. topographic maps.
B. thematic maps.
C. mercator maps.
D. value-by-area maps.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

110. A relatively new remote sensing technology that utilizes an airborne laser to transmit light out to an object is known as

A. thermal scanning.
B. radar.
C. lidar.
D. global positioning systems.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

111. Recording latitude and longitude coordinates from the Internet and using a GPS unit to find the 'treasure' is known as

A. geosurfing.
B. geohunting.
C. geotreasuring.
D. geocaching.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

112. Web applications that combine data from more than one source into an integrated experience are known as

A. mashups.
B. cartograms.
C. mental maps.
D. large-scale maps.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.06 Spatial Technologies
Topic: Remote Sensing and Global positioning System

113. A computer-based set of procedures for handling geographically referenced information is known as

A. global positioning systems (GPS).
B. geographic information systems (GIS).
C. digitally integrated geography (DIG).
D. intelligent geographic design (IGD).

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.07 GIS
Topic: Geographic Information System

114. The first step in developing a GIS is to create a digital record of geographic information known as a

A. digital depository.
B. geographic database.
C. computerized repository.
D. geofile.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.07 GIS
Topic: Geographic Information System

115. A set of imaginary lines that intersect at right angles to form a system of reference for locating points on the surface of the earth is known as the

A. Spherical Lattice.
B. Earth Network.
C. Worldwide Web.
D. Geographic Grid.

Accessibility: Keyboard Navigation
Bloom's Level: 3. Apply
Gradable: automatic
Section: 02.02 Locating Points on a Sphere
Topic: Locating Places using Longitude and Latitude

116. Which of the following statements is correct?

A. A map that shows correct distances always distorts direction
B. A map that shows correct shapes of regions always distorts distances
C. A map that shows correct areal relationships always distorts the shapes of regions
D. A map that shows correct distances always distorts areal relationships

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

117. A bronze marker fixed in the ground and represented by a small x on a topographic map is known as a

A. benchmark.
B. global standard.
C. ground truth.
D. terrain indicator.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.05 Types of Maps
Topic: Types of Maps and Map Symbols

118. The equal-area map projection developed to reflect concern for the problems of the Third World by providing a less European-centered representation of the world is the

A. Mercator Projection.
B. Peters Projection.
C. Robinson Projection.
D. Copernican Projection.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.03 Map Projections
Topic: Understanding Map Projections

119. The essence of a geographical information system (GIS) is

A. information layering.
B. verbal scaling.
C. neatlining.
D. qualitative analysis.

Accessibility: Keyboard Navigation
Bloom's Level: 1. Remember
Gradable: automatic
Section: 02.07 GIS
Topic: Geographic Information System

Chapter 02 Test Bank: Techniques of Geographic Analysis Summary

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Accessibility: Keyboard Navigation-112
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