SECTION 2.2 Types of Maps

In your textbook, read about Mercator, conic, and gnomonic projections. Label each map projection as conic, gnomonic or Mercator.

1. 

2. 

3. 

4. Used as road and weather maps

5. Has parallel lines of latitude and longitude

6. Made by projecting points and lines from a globe onto a piece of paper that touches the globe at a single point

7. Distorts direction and distance between landmasses

8. Exaggerates the areas of landmasses near the poles, but correctly shows their shape

9. Made by projecting points and lines from a globe onto a cone

10. Has very little distortion in the areas or shapes of landmasses that fall along a certain line of latitude

11. Used by navigators to plot great-circle routes

Write the name of the map projection—Mercator, conic, or gnomonic—for each description.
SECTION 2.2  Types of Maps, continued

In your textbook, read about topographic maps and contour lines. Use each of the terms below just once to complete the passage.

contour interval  contour lines  hachures  index contours  topographic maps

Maps that show changes in elevation of Earth’s surface are called (12) _________________. On this kind of map, points of equal elevation are connected by (13) _________________. The difference in elevation between two side-by-side contour lines is called the (14) _________________. Contour lines whose elevation is marked by a number on the map are known as (15) _________________. Contour lines that indicate depressions have (16) _________________, or short lines at right angles to the contour lines.

The contour interval on the map below is 20 m. Use the contour map to answer the following questions.

17. Which of the labeled points on the map has the highest elevation?

________________________________________________________________________________________

18. What is the elevation of the highest labeled point?

________________________________________________________________________________________

19. Which of the labeled points on the map has the lowest elevation?

________________________________________________________________________________________

20. What is the elevation of the lowest labeled point?

________________________________________________________________________________________
SECTION 2.2  Types of Maps, continued

In your textbook, read about map legends and map scales. Use each of the terms below to complete the following statements.

fractional scale graphic scale map legend map scale verbal scale

21. A ________________ explains what the symbols on a map represent.

22. To measure distances on a map, you need to use the ________________, of which there are three types.

23. A ________________ expresses distance as a statement, such as one centimeter is equal to one kilometer.

24. A ________________ consists of a line that represents a certain unit of distance, such as 5 km.

25. A ________________ expresses distance as a ratio, such as 1:63 500.

The map and map legend below have been reduced to fit this space. Use the map and the map legend to answer the following questions.

26. Which city on the map is closest to a campground?

27. Which highway leads to a skiing area?

28. Which two cities are connected by a railroad?

29. Look at the verbal scale. If the distance from Centerville to Oak Hills is 10 km, how far apart should these cities be on the map?