**Chapter 13**

**Digital Landscaping**

1. In the coordinate system, which variable represents elevation?

a. a

b. x

c. y

d. z

2. A horizontal datum is a baseline used as a starting point in measuring elevation values (either above or below this value).

a. True

b. False

3. A topographic map shows the features on the land.

a. True

b. False

4. All topographic maps use the same map scale.

a. True

b. False

5. DRG maps are georeferenced.

a. True

b. False

6. GeoTIFF files do not carry spatial referencing.

a. True

b. False

7. The white, information-filled border around a topographic map is known as the:

a. key.

b. legend.

c. perimeter.

d. collar.

8. Contour lines on a map represent areas of common elevation.

a. True

b. False

9. In general, a narrower contour interval is used when mapping more mountainous terrain.

a. True

b. False

10. Small-scale maps tend to use a wider contour interval.

a. True

b. False

11. Most digital terrain models (DTMs) are 2.5D models.

a. True

b. False

12. A digital terrain model (DTM) is a model of the landscape that is used in conjunction with GIS or remotely sensed imagery.

a. True

b. False

13. A Triangulated Irregular Network is a type of DTM.

a. True

b. False

14. Which set of data is made available online via the USGS National Map?

a. DTM

b. LIDAR

c. 3DEP

d. TIN

15. The term used to describe how far a person can see before his or her view is blocked by the terrain is

a. slope.

b. viewshed.

c. GeoEye.

d. horizontal datum.

16. SRTM resulted in a highly accurate digital elevation model of about what percentage of Earth?

a. 50%

b. 60%

c. 70%

d. 80%

17. Which of the following does LIDAR use to measure terrain?

a. a microwave pulse

b. laser beams

c. infrared energy

d. sound echoes

18. Slope is calculated as:

a. z/x.

b. y/z.

c. rise/run.

d. horizontal distance/vertical distance.

19. Most terrain models are actually viewed in 2.5 dimensions, not 3 dimensions.

a. True

b. False

20. ASCII is the industry standard for storing LIDAR data.

a. True

b. False

21. Which method of making a terrain model look more realistic involves showing how the terrain would look under different lighting conditions?

a. azimuthal

b. skew

c. tessellation

d. hillshade

22. The highest value for the Sun altitude is \_\_\_\_, while the highest value for the Sun azimuth is \_\_\_\_.

a. 10; 45

b. 90; 360

c. 180; 180

d. 45; 90

23. In draping, a remotely sensed image is overlaid on a hillshade.

a. True

b. False

24. In vertical exaggeration, *y*-values are artificially enhanced for terrain visualization purposes.

a. True

b. False

25. In the Sun azimuth, which degree measurement equates to due south?

a. 0

b. 90

c. 180

d. 270