***Introduction to Geographic Information Systems, 9e* (Chang)**

**Chapter 1 Introduction**

1) Define a GIS.

2) GIS is often described as a tool for integrating data from different sources. Provide an example that supports the claim.

3) One of the components of a GIS is "organization." Why?

4) Define "geospatial data."

5) List the major categories of GIS activities.

6) Explain how the vector data model differs from the raster data model in representing spatial features.

7) Explain how GIS and location-based services are linked.

8) How does a GIS (e.g., ArcGIS) differ from Google Maps?

9) OpenStreetMap is often cited as an example of "collaborative Web mapping." Why?

10) Use an example to explain "volunteered geographic information."

11) Define geosocial data.

12) GIS software is only one of the elements of a GIS.

Answer: TRUE

13) Operational GIS can be traced back to the 1960s.

Answer: TRUE

14) An example of an open-source GIS is:

A) ArcGIS

B) Autodesk

C) QGIS

D) IDRISI

Answer: C

15) Which of the following features is a discrete feature?

A) Precipitation

B) Elevation

C) Roads

D) None of these are correct

Answer: C

16) Which of the following features is a continuous feature?

A) Precipitation

B) Elevation

C) Land use

D) All of these are correct

E) Both Precipitation and Elevation

Answer: E

17) Vector data are better suited for representing \_\_\_\_\_\_\_\_ features and raster data are better suited for representing \_\_\_\_\_\_\_\_ features.

A) continuous, discrete

B) discrete, continuous

Answer: B

18) One can use both vector data and raster data in a GIS project.

Answer: TRUE

19) Which of the following represents composite features?

A) Polygons

B) TINs

C) Lines

D) None of these are correct

Answer: B

20) One would normally begin with \_\_\_\_\_\_\_\_ in a GIS project:

A) data display

B) data acquisition

C) data analysis

D) data exploration

Answer: B

21) ArcGIS users can convert data they create in GIS and use the data with Google Earth.

Answer: TRUE

22) Which of the following activities can take advantage of a GIS?

A) crime mapping

B) interactive mapping

C) transportation planning

D) all of these are correct

Answer: D

23) Collaborative Web mapping is an example of Web 2.0.

Answer: TRUE

24) Mashup mapping allows users to combine \_\_\_\_\_\_\_\_ with Web-based maps:

A) text

B) photos

C) videos

D) all of these are correct

E) text and photos only

Answer: D