

(Chapter 2 Test Bank Questions)

Multiple Choice:

1. A datum represents
  - a. **a reference surface used in computing coordinates.**
  - b. a zero point from which to calculate elevations.
  - c. the origin point for longitude measurements.
  - d. the curvature of the Earth, used in computing latitude and longitude.
2. A model of the Earth based on mean sea level is
  - a. **geoid.**
  - b. spheroid.
  - c. ellipsoid.
  - d. a great circle.
3. Where is the WGS84 datum used for measurements?
  - a. The whole world, except for the north and south poles
  - b. Only the entire northern hemisphere
  - c. **At all points across the world**
  - d. Only in North America
4. One minute of latitude is equivalent to
  - a. 60 degrees of latitude.
  - b. 1 degree of longitude.
  - c. **60 seconds of latitude.**
  - d. 60 meters.
5. The origin point for 0 degrees longitude is
  - a. **Greenwich, England.**
  - b. Washington, D.C., USA.
  - c. Paris, France.
  - d. San Salvador Island, the Bahamas.
6. The 180th meridian refers to the
  - a. compass rose line.
  - b. equator.

- c. prime meridian.
  - d. international date line.**
7. The shortest distance between two points on a sphere is the
- a. great-circle distance.**
  - b. longitude distance.
  - c. equatorial distance.
  - d. datum distance.
8. If it is 10pm Sunday night in London, England, what day and time is it in New York City, New York?
- a. 3am Sunday
  - b. 5pm Sunday**
  - c. 3am Monday
  - d. 10pm Monday
9. A map projection is a
- a. translation of locations on the Earth's surface to their corresponding locations on a flat surface.**
  - b. model of the Earth in regards to size and shape of objects on the Earth's surface.
  - c. representation of how time zones are distributed with respect to geographic boundaries.
  - d. system used in translating decimal degrees to other forms of measurement.
10. Each UTM zone covers how many degrees of longitude wide?
- a. 3
  - b. 6**
  - c. 15
  - d. 30
11. UTM coordinates are measured in
- a. degrees, minutes, and seconds.
  - b. miles.
  - c. meters.**
  - d. feet.
12. What is used to ensure that UTM measurements of the southern hemisphere have a positive value?
- a. A false northing value**
  - b. A false easting value
  - c. A false southing value
  - d. A false polar value

13. Each UTM zone uses a false easting value of
- a. 50 miles.
  - b. 500,000 m.**
  - c. 10,000,000 ft.
  - d. 15 degrees of longitude.
14. How are SPCS zones determined?
- a. By every 3 degrees of longitude and every 3 degrees of latitude indicating a new zone
  - b. By every 2,000,000 feet beginning a new zone
  - c. By the geographic boundaries of states and counties**
  - d. By using the states' outlines for the boundaries, then cutting each state exactly in half