

High School Cartography Fundamentals

Geography · Answer Key · 12 Questions

1. What spatial characteristic is preserved by the Mercator map projection?

- A) True relative land area
- B) Shape and local angles**
- C) Exact distance between any two points
- D) True distance along all meridians

2. Which map projection accurately preserves relative area sizes across the globe, but severely distorts shapes?

- A) Mercator projection
- B) Robinson projection
- C) Gall-Peters projection**
- D) Stereographic projection

3. On a topographic map, what do closely spaced contour lines represent?

- A) A gentle slope
- B) A steep slope**
- C) A river channel
- D) An area of constant elevation

4. Which map scale shows the greatest level of detail for a localized area?

- A) 1:1,000,000
- B) 1:250,000
- C) 1:50,000
- D) 1:10,000**

5. What type of thematic map uses different shades or colors to represent statistical values across predefined regions?

- A) Dot density map
- B) Isopleth map
- C) Choropleth map**
- D) Cartogram

6. In cartography and meteorology, what do isolines known as 'isohyets' connect?

- A) Points of equal atmospheric pressure
- B) Points of equal elevation
- C) Points of equal precipitation**
- D) Points of equal temperature

7. What is the designated zero-degree line of longitude passing through Greenwich, England?

- A) Equator
- B) Prime Meridian**
- C) International Date Line
- D) Tropic of Cancer

8. Which framework integrates hardware, software, and spatial data to capture, analyze, and layer geographic information?

- A) Global Positioning System (GPS)
- B) Geographic Information System (GIS)**
- C) Remote Sensing System (RSS)
- D) Computer-Aided Design (CAD)

9. What path represents the shortest distance between any two points on the surface of a spherical planet?

- A) Rhumb line
- B) Loxodrome
- C) Great circle route**
- D) Parallel of latitude

10. Which class of map projection is formed by projecting Earth's surface onto a flat plane tangent to a single point, often used for polar regions?

- A) Cylindrical projection
- B) Azimuthal projection**
- C) Conic projection
- D) Pseudocylindrical projection

11. What is the term for gathering physical information about Earth's surface using sensors on satellites or aircraft without physical contact?

- A) Geodesy
- B) Remote sensing**
- C) Photogrammetry
- D) Triangulation

12. What feature on a standard map translates visual symbols, patterns, and colors into their real-world meanings?

- A) Compass rose
- B) Map key**
- C) Scale bar
- D) Neatline