

1. The revolving triangle method of drawing lines enables one to draw:

- (a) A line parallel to another line
- (b) A line at an angle with another line
- (c) A line bisecting another line
- (d) A line perpendicular to another line

2. Using a T-square and a 45° and a 30°-60° triangle, a student may draw lines at any angle which is a multiple of:

- (a) 5°
- (b) 10°
- (c) 15°
- (d) 20°

3. The heaviest lines in any drawing are:

- (a) Construction lines
- (b) Dimension lines
- (c) Object lines
- (d) Hidden lines

4. A drawing pen is checked for dullness by:

- (a) Using a micrometer
- (b) The reflection method
- (c) Cutting paper with one blade
- (d) Running blade across fingertips

5. On a topographic map a canal would be classified as:

- (a) Culture
- (b) Hydrography
- (c) Relief
- (d) Vegetation

6. When the scale of a topographic map is 1 in. equals 2000 ft. the representative fraction is:

- (a) 1:62,500
- (b) 1:24,000
- (c) 1:2,400
- (d) 1:31,680

1. (d); 2. (c); 3. (c); 4. (b); 5. (b); 6. (b)
7. The most likely contour interval on a large-scale topographic map of flat country would be:
- (a) 2 ft.
 - (b) 10 ft.
 - (c) 20 ft.
 - (d) 100 ft.
8. The type of lettering most often used in highway drawing is:
- (a) Modern roman
 - (b) Commercial gothic
 - (c) Old English
 - (d) Old roman
9. The first item inked on a tracing is:
- (a) Straight horizontal lines
 - (b) Circles
 - (c) Cross-hatching
 - (d) Lettering
10. The projection used for a U.S.G.S. topographic map is:
- (a) Mercator
 - (b) Polyconic
 - (c) Gnomonic
 - (d) Stereographic
11. The shape of a U.S.G.S. topographic map with a scale of 1:24,000, covering an area of $0^{\circ}7'30''$ of latitude and of longitude, is:
- (a) Square
 - (b) Rectangular
 - (c) Parallelogram
 - (d) Rhombic
12. The planimetric map shows only:
- (a) Drainage
 - (b) Culture
 - (c) Drainage and culture
 - (d) Drainage, culture, and relief

13. The topography, referenced by a field surveyed base line, is plotted by using:
- (a) A protractor
 - (b) A linear plotter
 - (c) Tangent offsets
 - (d) Perpendicular lines to the base line
14. The rodreadings of the level survey are plotted on the cross-sections after the height of instrument has been:
- (a) Added
 - (b) Subtracted
 - (c) Divided
 - (d) Multiplied
15. The scale for the general highway plan for a rural highway is usually made at:
- (a) 1 in. = 10 ft.
 - (b) 1 in. = 20 ft.
 - (c) 1 in. = 50 ft.
 - (d) 1 in. = 100 ft.
16. The size ratio of the capital "W" to the capital "M" is:
- (a) 8 to 7
 - (b) 8 to 6
 - (c) 8 to 6-1/2
 - (d) 8 to 5-1/2
17. An item not classified as special equipment is a:
- (a) Beam compass
 - (b) Contour pen
 - (c) Railroad pen
 - (d) Erasing shield