

Chapter – 14

Practical geometry

Worksheet – 2

1. A perpendicular bisector divides a line segment into \_\_\_\_\_ parts.
  - a. Two unequal
  - b. Two equal
  - c. Three unequal
  - d. Three equal
2. Which of the following is not an angle of set square?
  - a. 30
  - b. 60
  - c. 75
  - d. 90
3. If diameter of a circle is 19 m, then its radius is \_\_\_\_\_.
  - a. 7.5 m
  - b. 8.5 m
  - c. 9 m
  - d. 9.5 m
4. A \_\_\_\_\_ is the longest chord of the circle?
  - a. Radius
  - b. Circumferences
  - c. Diameter
  - d. Center
5. If an angle of  $90^\circ$  is bisected twice, then each such angle obtained will measure –
  - a.  $22.5^\circ$
  - b.  $30^\circ$
  - c.  $45^\circ$
  - d.  $60^\circ$
6. If an angle of  $180^\circ$  is bisected twice, then each such angle obtained will measure –
  - a.  $60^\circ$
  - b.  $120^\circ$
  - c.  $45^\circ$

- d.  $60^\circ$
7. If angle of  $105^\circ$  is bisected, then what will be the measure of each angle formed?
- $55^\circ$
  - $52.5^\circ$
  - $53^\circ$
  - $54^\circ$
8. When a ray makes one complete rotation, the measure of angle formed is –
- $90^\circ$
  - $180^\circ$
  - $270^\circ$
  - $360^\circ$

9. Match the column:

| Column A                | Column B                                                        |
|-------------------------|-----------------------------------------------------------------|
| a. Ruler                | i. Is used to draw circles or arcs.                             |
| b. Compass drawing tool | ii. Has markings on it to measure length.                       |
| c. Needle point         | iii. Diagonals bisect each other.                               |
| d. Square               | iv. Serves as center point to draw arcs and circles by compass. |

10. State true or false –
- Two rays that divide an angle into three equal parts are called trisectors of the angle.
  - Collinear points lie on the same line.
  - Midpoint of a line segment divides into three equal parts.
  - Congruent segments are segments with different lengths.
11. Draw a line segment of length 8.9 cm using a ruler?
12. Construct a parallelogram of base 8 cm and side 5 cm through set squares?
13. Construct a line segment of 6.1 cm using a ruler and a compass?
14. Construct a perpendicular bisector of line segment  $\overline{AB} = 10$  cm and measure the length of perpendicular bisector. Make use of a ruler and compass.

15. Line segment  $\overline{DE} = 5.8$  cm. Construct  $\overline{AB}$  such that  $AB = 2 \overline{DE}$  ?
16. A line segment  $\overline{PQ} = 3.4$  cm is given. Construct a line segment  $\overline{AB}$  such that  $\overline{AB} = 3 \overline{PQ}$ ?
17. Draw any line segment  $\overline{AB}$ . Without measuring  $\overline{AB}$ , construct a copy of  $\overline{AB}$ ?
18. A line segment  $\overline{AB}$  of unknown length is given. Construct a line segment  $\overline{DE}$  such that  $\overline{DE}$  is twice of  $\overline{AB}$ ?
19. Draw a line segment  $\overline{PQ}$ . Mark a point R anywhere on it. Draw a perpendicular to  $\overline{PQ}$  on point R?
20. Draw a line segment  $\overline{PQ}$ . Mark a point R at some distance from  $\overline{PQ}$ . Draw a perpendicular to  $\overline{PQ}$  from point R?