

Practical Geometry

1. Draw a circle of radius 5.6cm
2. With the same centre O, draw two circles of radii 5cm and 2.5cm
3. Draw any circle and mark points P, Q and R such that
 - a) P is on the circle
 - b) Q is in the interior of the circle.
 - c) R is in the exterior of the circle.
4. Draw any line segment \overline{PQ} . Mark any point B on it. Through B, draw a perpendicular to \overline{PQ} .
5. Draw \overline{XY} of length 8.3cm and find its axis of symmetry.
6. Draw a line segment of length 10.5cm and construct its perpendicular bisector.
7. With \overline{AB} of length 6.2cm as diameter, draw a circle.
8. Draw a circle of radius 4.5cm. Draw any two of its chords. Construct the perpendicular bisectors of these chords. Where do they meet.
9. Draw a line segment of length 10.8cm. Using compasses, divide it into four equal parts . Verify by actual measurement.
10. Draw the perpendicular bisector \overline{AB} of whose length is 8.3cm
 - a) Take any point P on the bisector drawn. Examine whether $\overline{PA} = \overline{PB}$
 - b) If M is the mid point of \overline{AB} , what can you say about the length of \overline{MA} and \overline{MB} ?
11. Draw an angle of measure 137° and construct its bisector.
12. Draw a right angle and construct its bisector.
13. Draw an angle of measure 152° and divide into four equal parts
14. Draw an angle of measure 60° and bisect it.
15. Draw an angle of measure 150° and bisect it.
16. Construct with ruler and compasses, angles of following measures.
 - a) 60°
 - b) 120°
 - c) 90°
 - d) 45°
 - e) 15°
 - f) 30°
17. Draw a circle and any two of its diameter. What is the figure obtained? What figure is obtained if the diameter are perpendicular to each other?