

1. How many lines can be drawn parallel to a given line, through a point outside the given line?
2. Construct a right-angled triangle whose hypotenuse measures 5 cm and one of the other sides measures 3.2 cm.
3. Draw 2 parallel lines at a distance of 5 cm apart.
4. Construct an obtuse angled triangle which has a base of 5 cm and base angles of  $30^\circ$  and  $110^\circ$ .
5. Construct a  $\triangle ABC$  whose sides are  $AB = 3$  cm,  $BC = 4$  cm and  $\angle B = 60^\circ$ .
6. Draw an equilateral triangle whose each side is 4.5 cm.
7. Draw an isosceles right triangle  $\triangle PQR$ , such that  $PQ = QR = 5.8$  cm.
8. Construct a  $\triangle PQR$  in which  $m\angle P = 60^\circ$  and  $m\angle Q = 30^\circ$ ,  $QR = 4.8$  cm.
9. Draw an isosceles right-angled triangle whose hypotenuse is 5.8 cm.
10. Construct an equilateral triangle whose altitude is 4.5 cm.
11. Which of these triangle can be constructed?
  - (a)  $\triangle ABC$ ,  $\angle A = 85^\circ$ ,  $\angle B = 115^\circ$ ,  $AB = 5$  cm.
  - (b)  $\triangle PQR$ ,  $\angle Q = 30^\circ$ ,  $\angle R = 60^\circ$ ,  $QR = 4.7$  cm.
  - (c)  $\triangle ABC$ ,  $BC = 2$  cm;  $AB = 4$  cm;  $AC = 2$  cm.
  - (d)  $\triangle LMN$ ,  $\angle L = 60^\circ$ ,  $\angle N = 120^\circ$ ,  $LM = 5$  cm.
12. Which of the following sets of triangles could be the lengths of the sides of a right-angled triangle:
  - (a) 3 cm, 4 cm, 6 cm
  - (b) 9 cm, 16 cm, 26 cm
  - (c) 1.5 cm, 3.6 cm, 3.9 cm
  - (d) 7 cm, 24 cm, 26 cm