11. Constructions

Q 1 Draw an angle of 135° using ruler and compasses only.

Marks (2)

Q 2 Draw a line segment of length 8 cm. Bisect it and measure the length of each part.

Marks (3)

Q 3 Construct an equilateral triangle whose altitude is 4 cm.

Marks (3)

Q 4 Constructed a triangle ABC in which AB = 5.8 cm BC+CA = 8.4 cm and $\angle$ B = 60 degree.

Marks (3)

Q 5 Construct a triangle ABC in which BC = 3.4 cm , AB–AC = 1.5 cm and $\angle B = 45^{\circ}$.

Marks (3)

Q 6 Construct an equilateral triangle whose altitude is 5 cm.

Marks (3)

Q 7 Construct a triangle ABC in which AB = 5.8 cm , BC + CA = 8.4 cm and $\angle B = 45°$.

Marks (4)

Q 8 Construct a right angled triangle whose base is 5 cm and sum of its hypotenuse and other side is 8 cm. Marks (4)

Q 9 Construct a triangle ABC in which BC = 3.4 cm , AB – AC = 1.5 cm and $\angle B = 30°$. Marks (4)

Q 10 Write the steps of constructions for a triangle ABC whose perimeter and two base angles $\angle B$ and $\angle C$ are given.Marks (4)

Q 11 Using ruler and compasses only, construct a triangle ABC from the following data AB+BC+CA = 12 cm $\angle B = 45^{\circ}$ and $\angle C = 60°$.

Marks (4)

Most Important Questions

Q 1 Q 2 Construct an angle 45° at the initial point of a line segment PQ of length 6 cm.
Q 3 Construct an angle 30° at the initial point of a line segment PQ of length 4 cm.
Q 4 Construct an angle 15° at the initial point of a line segment PQ of length 6 cm.
Q 5 Construct an angle 105° at the initial point of a line segment PQ of length 4 cm.
Q 6 Construct an angle 135° at the initial point of a line segment PQ of length 5 cm.
Q 7 Construct an angle $22\frac{1}{2}°$ at the initial point of a line segment PQ of length 7 cm.
Q 8 Construct an angle 75° at the initial point of a line segment PQ of length 5 cm.
Q 9 Construct a triangle PQR, in which PQ = 7cm, $\angle P = 60°$ and PR + RQ = 13 cm.

Q 10 Construct a triangle PQR, in which PQ = 6 cm $\angle P = 45°$ and PR + RQ = 10 cm.

Q 11 Construct a triangle PQR, in which PQ = 8 cm, $\angle P = 45°$ and PR – RQ = 3 cm.

Q 12 Construct a triangle PQR, in which PQ = 7cm, $\angle P = 60°$ and RQ – PR = 2.5 cm.

Q 13 Q 14 Construct a triangle PQR, in which PQ = 7cm, $\angle P = 30°$ and PR – RQ = 2 cm.

Q 15 Construct a similar triangle PQR, in which $\angle P = 30°$ and $\angle Q = 60°$ and PR + RQ + QP = 12 cm.

Q 16 Construct a triangle PQR, in which $\angle P = 45°$ and $\angle Q = 60°$ and PR + RQ + QP = 9 cm.