

Question 1.

State whether the triangle is possible to construct if

- (a) In $\triangle ABC$, $m\angle A = 80^\circ$, $m\angle B = 60^\circ$, $AB = 5.5$ cm
- (b) In $\triangle PQR$, $PQ = 5$ cm, $QR = 3$ cm, $PR = 8.8$ cm

Question 2.

Draw an equilateral triangle whose each side is 4.5 cm.

Question 3.

Draw a $\triangle PQR$, in which $QR = 3.5$ cm, $m\angle Q = 40^\circ$, $m\angle R = 60^\circ$.

Question 4.

There are four options, out of which one is correct. Choose the correct one:

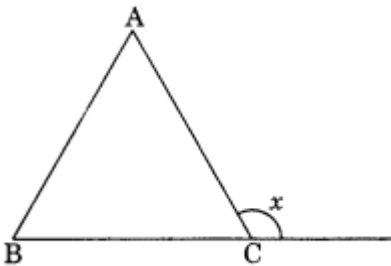
- (i) A triangle can be constructed with the given measurement.
- (a) 1.5 cm, 3.5 cm, 4.5 cm
- (b) 6.5 cm, 7.5 cm, 15 cm
- (c) 3.2 cm, 2.3 cm, 5.5 cm
- (d) 2 cm, 3 cm, 6 cm

Question 5.

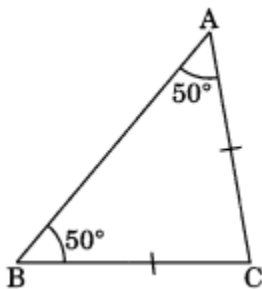
What will be the other angles of a right-angled isosceles triangle?

Question 6.

What is the measure of an exterior angle of an equilateral triangle?

**Question 7.**

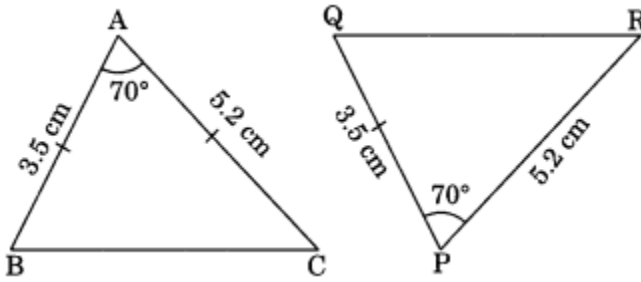
In $\triangle ABC$, $\angle A = \angle B = 50^\circ$. Name the pair of sides which are equal.

**Question 8.**

If one of the other angles of a right-angled triangle is obtuse, whether the triangle is possible to construct.

Question 9.

State whether the given pair of triangles are congruent.



Question 10.

Draw a $\triangle ABC$ in which $BC = 5\text{ cm}$, $AB = 4\text{ cm}$ and $m\angle B = 50^\circ$.

Question 11.

Draw $\triangle PQR$ in which $QR = 5.4\text{ cm}$, $\angle Q = 40^\circ$ and $PR = 6.2\text{ cm}$.

Question 12.

Construct a $\triangle PQR$ in which $m\angle P = 60^\circ$ and $m\angle Q = 30^\circ$, $QR = 4.8\text{ cm}$.

Question 13.

Draw an isosceles right-angled triangle whose hypotenuse is 5.8 cm .

Question 14.

Construct a $\triangle ABC$ such that $AB = 6.5\text{ cm}$, $AC = 5\text{ cm}$ and the altitude AP to BC is 4 cm .

Question 15.

Construct an equilateral triangle whose altitude is 4.5 cm