

St. Andrews Scots Sr. Sec. School

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Session: 2026-27 - Worksheet

Class: VII	Subject: Mathematics	Topic: Triangle and its Propertites	Worksheet - 16
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Do as Directed:

Question 1: The angles of a triangle are in the ratio 1 : 2 : 3. Find the measure of each angle.

Question 2: In a triangle, two angles measure 45° and 65° . Find the third angle.

Question 3: The exterior angle of a triangle is 130° and one of its interior opposite angles is 50° . Find the other interior opposite angle.

Question 4: The sides of a triangle are 4 cm, 6 cm, and 9 cm.
Check whether a triangle can be formed using these sides. Give reasons.

Question 5: In triangle ABC, $AB = AC$ and $\angle B = 35^\circ$. Find $\angle A$ and $\angle C$.

Question 6: The angles of a triangle are $(x + 20)^\circ$, $(2x + 10)^\circ$, and $(x - 10)^\circ$.
Find the value of x and hence find all the angles of the triangle.

Question 7: A ladder 10 m long is placed against a wall. Its foot is 6 m away from the wall. Find the height at which the ladder touches the wall.

Question 8: In triangle PQR, the exterior angle at Q is 110° and one of the interior opposite angles is 45° . Find the other interior opposite angle.

Question 9: The lengths of two sides of a triangle are 7 cm and 10 cm.
What should be the minimum and maximum length of the third side? Explain.

Question 10: A rectangular park is 24 m long and 7 m wide. Find the length of its diagonal.

Question 11: The hypotenuse of a right-angled triangle is 13 cm and one of its perpendicular sides is 5 cm. Find the length of the other side.

Question 12: Construct triangle ABC in which $AB = 5$ cm, $BC = 4$ cm and $AC = 6$ cm.

Question 13: Construct triangle PQR in which $PQ = 6$ cm, $QR = 5$ cm and .

Question 14: Construct triangle XYZ in which $XY = 7$ cm, and .

Question 15: Construct a right-angled triangle ABC with , $AB = 4$ cm and $BC = 3$ cm.