SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each)
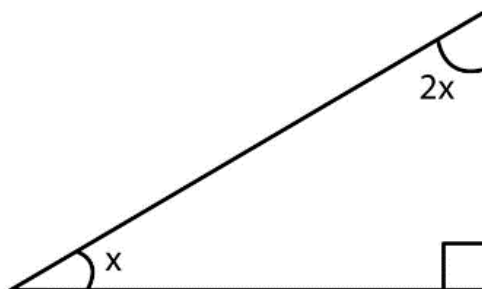
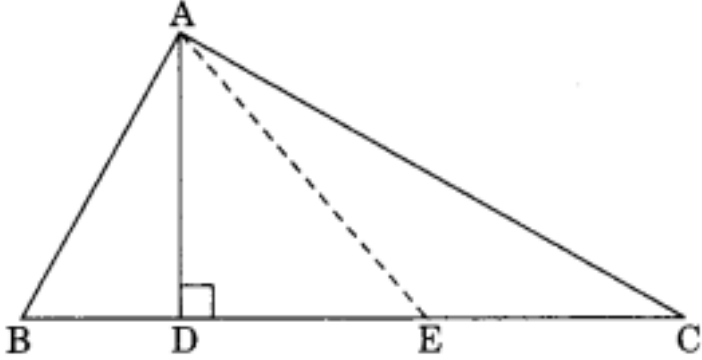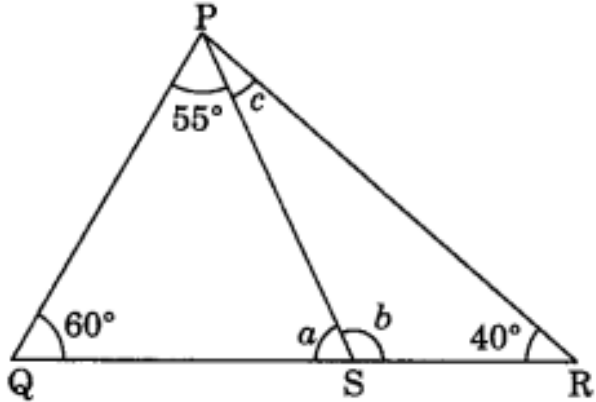|	
Q1.	In the given figure, two angles have measures 92° and 41°. Find the value of x and y.
Q2.	In the given figure, BC = CA and ∠A = 40°. Then, find the measure of ∠ACD.
Q3.	Find the value of the unknown x in the below figure.
Q4.	Is it possible to have a right-angled triangle with sides 7 cm, 24 cm and 25 cm. (show proper working)
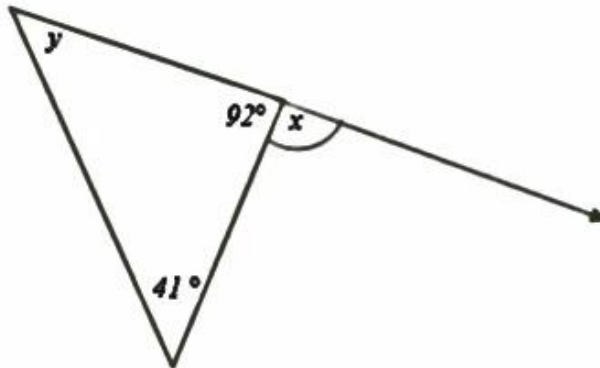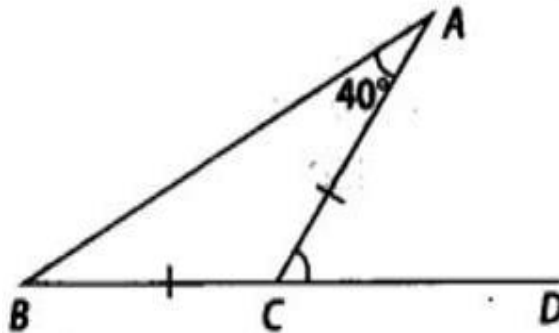
Q5.	Is it possible to have a triangle with sides 8 cm, 3 cm and 4 cm. (show proper working)
Q6.	In the given figure, name the median and the altitude if E is the midpoint of BC.
Q7.	The length of two sides of a triangle are 13 cm and 18 cm. Between what two measures should the length of the third side fall?
SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each)	
Q8.	One of the exterior angles of a triangle is 110° and the interior opposite angles are in the ratio 6:5. Find the angles of the triangle.
Q9.	In the following figure, find the unknown angles a, b and c. ![Triangle PQR with angles 55°, c, 60°, a, b, 40° and point S on QR](figure)
Q10.	A tree is broken at a height of 20 m from the ground and its top touches the ground at a distance of 15 m from the base of the tree. Find the original height of the tree.
Q11.	The angles of a triangle are in the ratio 1: 3: 5. Determine three angles. Name the type of triangle according to Angles and Sides.

Q12.	In the following figure, if ST = SU, then find the values of the unknown angles x and y.
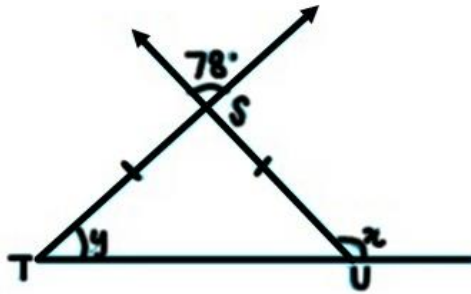
LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)

Q.13	Find the perimeter of the rectangle whose length is 60 cm and a diagonal are 61 cm.
Q14	The length of the diagonals of a rhombus is 20 cm and 48 cm. Find the perimeter of the rhombus.
Q15	A ladder of length 17 m reaches a window which is 8 m above the ground on one side of a street and at the same point it reaches a window 15 m high in a wall on opposite side. Find the width of the street.
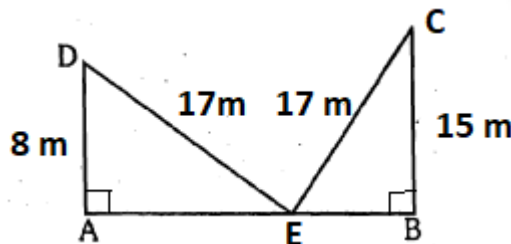
ANSWERS					
Q1.	$x = 88°, y = 47°$	**Q2.**	80°	**Q3.**	30°
Q4.	Yes	**Q5.**	No	**Q6.**	AD is the altitude. AE is the median.
Q7.	5 cm and 31cm	**Q8.**	60°, 50°	**Q9.**	a= 65°, b= 115°, c= 25°
Q10.	45 m	**Q11.**	20°,60°,100° i) Obtuse angled ii) Scalene	**Q12.**	$y = 51°, x = 129°$
Q13.	142 cm	**Q14.**	104 cm	**Q15.**	23 m