THE TRIANGLE AND ITS PROPERTIES
Subtopic: RIGHT-ANGLED TRIANGLES AND PYTHAGORAS PROPERTY

Section 1

1. Mark T for True and F for False

   1a. The side opposite to the right angle is called the biggest side.

   1b. If Pythagoras property holds the triangle need not be right angled.

2. Choose the correct answer.

   2a. In a right-angled triangle, the square of the hypotenuse is,

       a) Sum of the squares on the legs

       b) Equal to the square on one leg

       c) Equal to the rectangles on the legs

       d) Equal to the rectangle on one leg

   2b. The longest side of the triangle is,

       a) Base

       b) Altitude

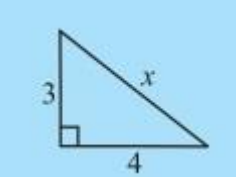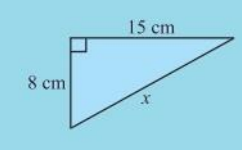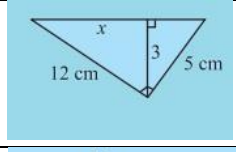   c) Hypotenuse

       d) Median

3. Fill in the blanks
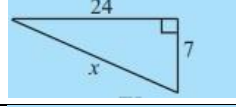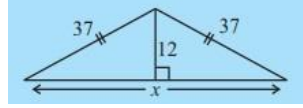
   3a. The two sides that hold the right angle in a right angled triangle are called _____.

   3b. _____ property helps in deciding whether a given triangle is _____.

4. Solve for x in table below.

Figure	Find x
a)	1)
b)	2)
c)	3
d)	4)
e)	5)

Section 2

5. ABC is a triangle. Right angled at C. If AB=25 cm and AC=7cm find BC.

6. Find the perimeter of the rectangle whose length is 40cm and diagonal is 41cm.
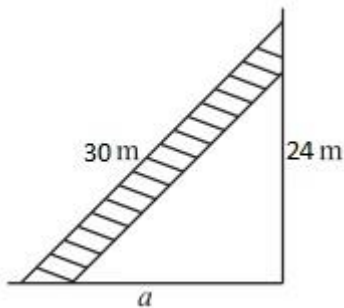
7. The diagonals of a rhombus measure 16cm and 30 cm. Find its perimeter.

8. A tree is broken at a height of 55cm from the ground and its top touches the ground when it falls, at a distance of 12m from the base of the tree. Find the original length of the tree.

Section 3

9. A 30m long ladder reached a window 24 m high from the ground on placing it against a wall at a distance 'a': Find the distance of the foot of the ladder from the wall.

10. 'The diagonal of a rectangle produce by itself the same area as produced by its length and breadth'– This is Baudhayan Theorem. Compare it with the Pythagoras property and explain if the above theorem is true.