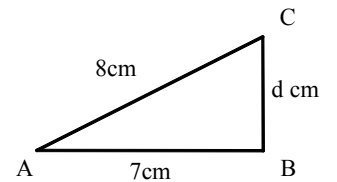
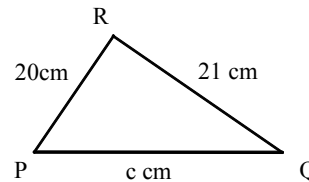
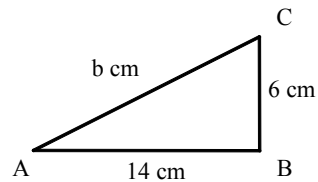
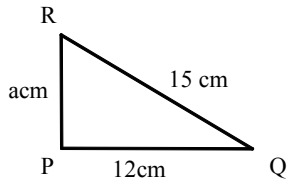
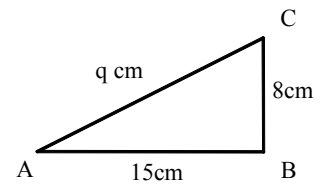
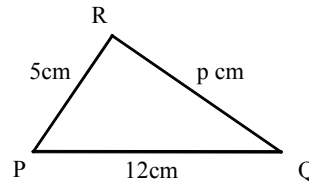
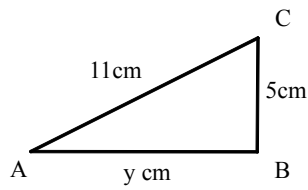
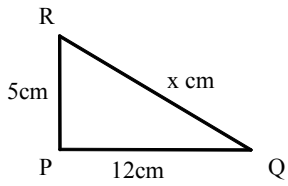


Pythagoras Theorem

1) Find the unknown side in each of the following triangles:



2) An isosceles triangle ABC has sides $AB=AC=10\text{ cm}$, and $BC=12\text{ cm}$. Draw the triangle, and find the perpendicular height from A to the midpoint of BC . Hence find the area of the triangle.

3) A ladder 3 m long is placed against a wall, with the foot of the ladder 1.2 m from the base of the wall. Draw a diagram, and find how far up the wall the ladder reaches.

4) Plot the points $X(2,7)$ and $Y(6,4)$ on coordinate axes. Draw a right-angled triangle with XY as the hypotenuse, and use Pythagoras' theorem to find the distance XY .

5) An isosceles trapezium $ABCD$ has sides $AB=CD=8\text{ cm}$, $BC=12\text{ cm}$ and $DA=18\text{ cm}$. Find its area.