

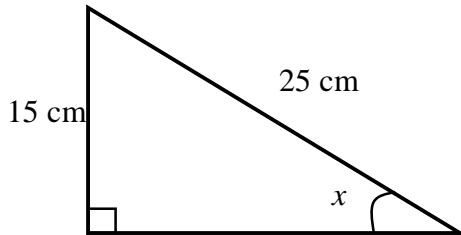
## Year 10 Mathematics Worksheet 7

Write the answers in your Exercise Book.

### Geometry

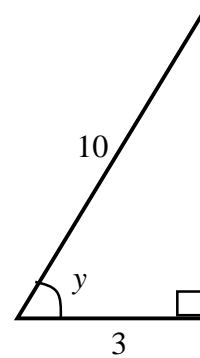
1. Find the size of unknown angles in the triangles given below.

(a)



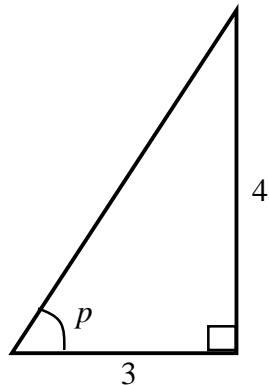
(2 marks)

(b)



(2 marks)

(c)



(2 marks)

2. A ladder is leaning against a wall. If the foot of the ladder is 3 m from the base of the wall and is at an angle of elevation of  $58^\circ$ , find:

(a) how far up the ladder extends. (2 marks)

(b) the length of the ladder. (2 marks)

3. A sailing boat is 100 m from the base of a vertical cliff. If the angle of elevation to the top of the cliff is  $30^\circ$ , find the height of the cliff. (2 marks)