Using Pythagoras' Theorem
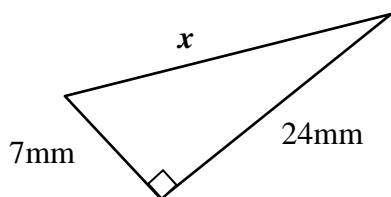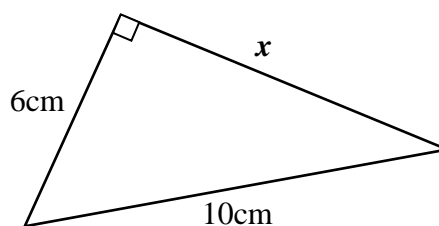
1. Find the length of x in each of the triangles below. [2, 2]
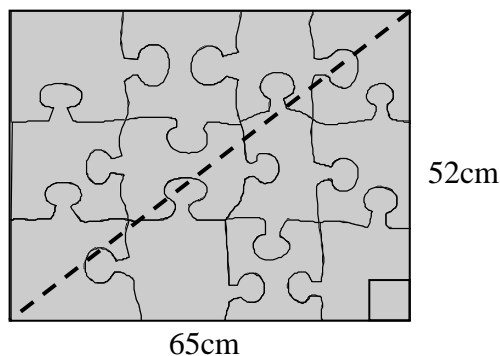
(a)

x
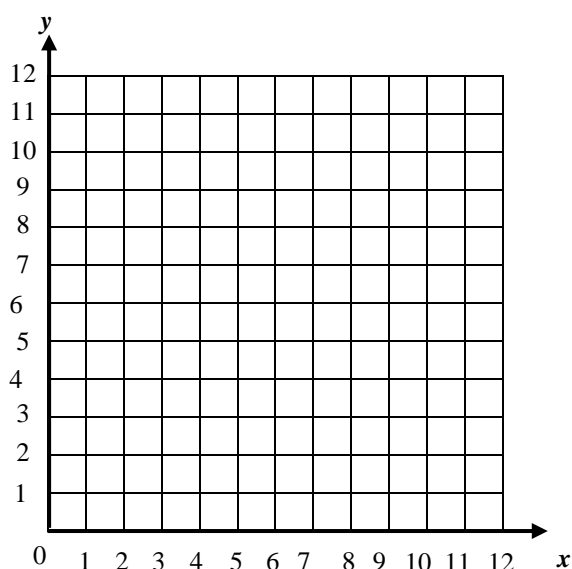
7mm

24mm

(b)

6cm

x

10cm

2. A rectangular jigsaw measures 65cm by 52cm. What length is its diagonal? [2]
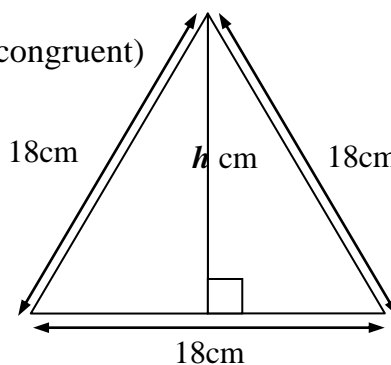
52cm

65cm

3.

(a) Plot the points A(3, 1) and B(10, 10)

(b) Make a right-angled triangle and mark in the lengths of the sides.

(c) Calculate the length of AB, to 1 dp. [1, 1, 2]

4. An equilateral triangle can be split into two identical (congruent) right angled triangles, as shown here

Calculate the height, h cm, of an equilateral triangle whose sides are each 18cm long.

18cm

h cm

18cm

18cm

[3]

[13 marks]