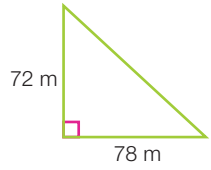
Half-time 2

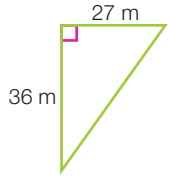
Ex. 2.2

1 For each of the following triangles, calculate the length of the hypotenuse (round your answers to two decimal places where necessary).

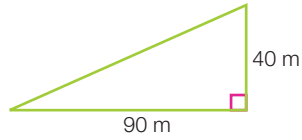
(a)



(b)



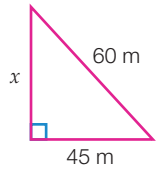
(c)



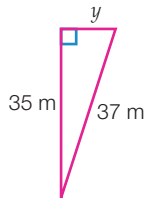
Ex. 2.3

2 For each of the following triangles, calculate the length of the unknown side (round to two decimal places where necessary).

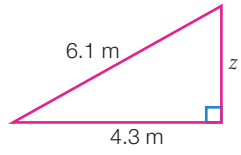
(a)



(b)



(c)



Ex. 2.1

3 Use Pythagoras' Theorem to show that a triangle with side lengths 10, 24 and 26 must be right-angled.

Ex. 2.2

4 Sharon is 20 metres due south of a target. She throws a ball which stops 16 metres due east of the target.

(a) Draw a diagram that shows this information.

(b) Calculate, correct to two decimal places, how far the ball travelled.

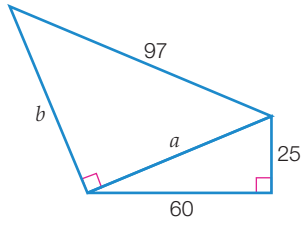
Ex. 2.1

5 Decide if each triangle with the given side lengths is right angled.

(a) (16, 63, 65) **(b)** (48, 55, 73) **(c)** (13, 84, 86)

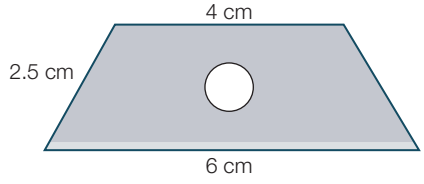
Ex. 2.2

6 Calculate the exact values of a and b.



Ex. 2.2

7 A safety blade is a symmetrical shape with the dimensions shown. Calculate the height of the blade (round your answer to two decimal places).



Ex. 2.3

8 A ladder 4 m long is placed against a wall so that the foot of the ladder is 1.5 m away from the wall.

(a) Draw a diagram that shows this information.

(b) Calculate how far up the wall the ladder will reach. Give your answer correct to two decimal places.