Building Blocks – Pythagoras' Theorem
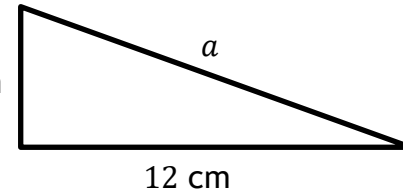
Block 1

Calculate:

a) 4^2 b) $9^2 + 2^2$ c) $\sqrt{36}$ d) $\sqrt{5^2 - 3^2}$
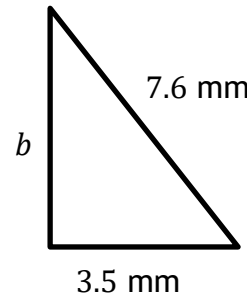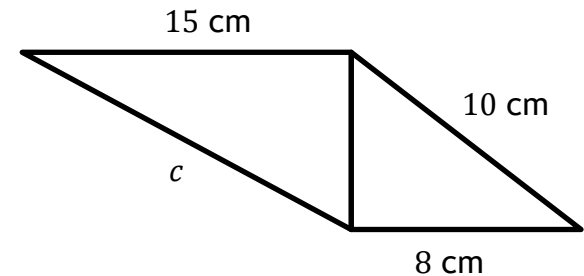
Find a

5 cm

a

12 cm

Block 2

Zach cycled south for 12 km.
He then turned and cycled east.
When he stopped for a rest, the shortest
distance back to his starting point was 20 km.
Calculate how many kilometres Zach cycled
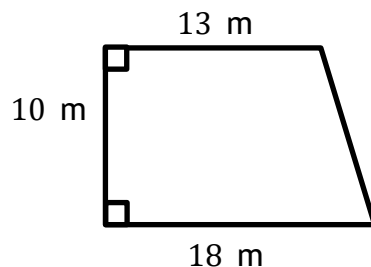while travelling east.

Find b to 3 s.f.

7.6 mm

b

3.5 mm

Find the length of c to 1 decimal place.

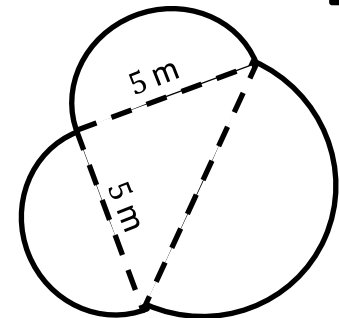15 cm

10 cm

c

8 cm

Block 3

Here is part of a field.
A farmer wants to put a fence all the way around the edge.
Fencing is sold in 10 m packs that cost £250 each.
How much will the farmer have to spend?

13 m

10 m

18 m

A garden landscaper is making
a grass feature as pictured.

Calculate the area that will
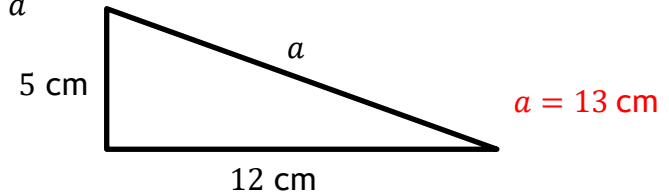be covered in grass to 1
decimal place.

5 m

5 m

Dr Frost
LEARNING

Building Blocks - Pythagoras' Theorem

Block 1

Calculate: ❌

a) 4^2
b) $9^2 + 2^2$
c) $\sqrt{36}$
d) $\sqrt{5^2 - 3^2}$

16   85   6   4

Find a ❌

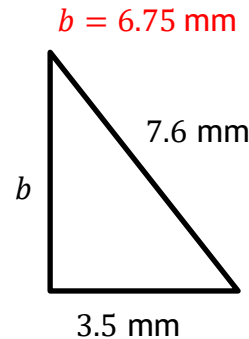5 cm a

12 cm

$a = 13$ cm

Block 2

Zach cycled south for 12 km. ❌
He then turned and cycled east.
When he stopped for a rest, the shortest
distance back to his starting point was 20 km.
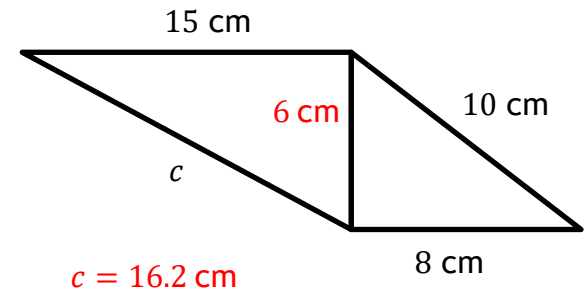Calculate how many kilometres Zach cycled
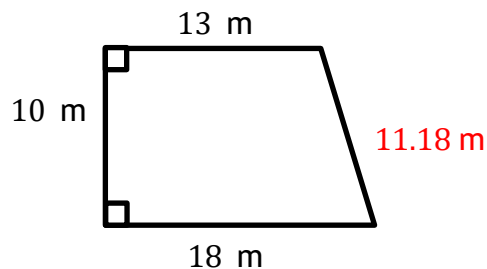while travelling east.

16 km

Find b to 3 s.f. 🖩

$b = 6.75$ mm

7.6 mm

b

3.5 mm

Find the length of c to 1 decimal place. 🖩

15 cm

6 cm   10 cm

c

8 cm

$c = 16.2$ cm

Block 3

Here is part of a field. 🖩
A farmer wants to put a fence all the way around the edge.
Fencing is sold in 10 m packs that cost £250 each.
How much will the farmer have to spend?

13 m

10 m

11.18 m

18 m

P= 52.2 m

£250 × 6
= £1500

A garden landscaper is making 🖩
a grass feature as pictured.

Calculate the area that will
be covered in grass to 1
decimal place.

5 m

5 m

Area= 51.8 m^2