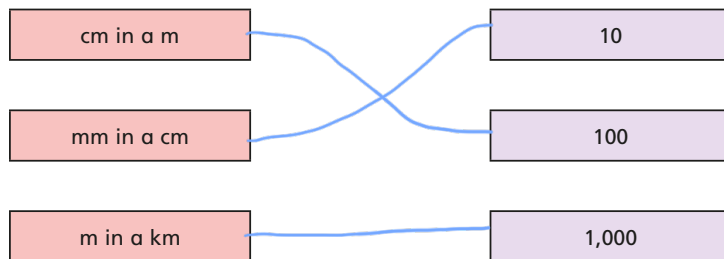


Convert metric measures of lengths

1 a) Match the measurements to the numbers.



b) Nijah thinks there are one million millimetres in a metre.

Is Nijah correct? no

Show workings to support your answer.

2 Work out the calculations.

a) $7 \times 10 =$ 70

$7 \times 100 =$ 700

$7 \times 1,000 =$ 7,000

b) $17 \times 10 =$ 170

$17 \times 100 =$ 1,700

$17 \times 1,000 =$ 17,000

c) $1.7 \times 10 =$ 17

$1.7 \times 100 =$ 170

$1.7 \times 1,000 =$ 1,700

d) $0.7 \times 10 =$ 7

$0.7 \times 100 =$ 70

$0.7 \times 1,000 =$ 700

3

Convert the lengths to metres.

- a) 2 km 2,000 m 2.5 km 2,500 m 2.05 km 2,050 m
- b) 600 cm 6 m 650 cm 6.5 m 605 cm 6.05 m
- c) 65 cm 0.65 m 6.5 cm 0.065 m 6.5 km 6,500 m

4

Convert the lengths to centimetres.

- a) 3 m 300 cm 3.5 m 350 cm 0.35 m 35 cm
- b) 80 mm 8 cm 800 mm 80 cm 8 m 800 cm
- c) 92 mm 9.2 cm 92 m 9,200 cm 9.2 m 920 cm

5

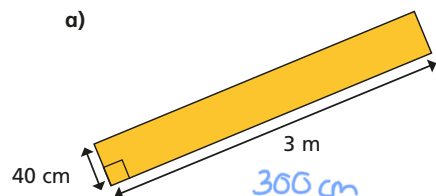
Write $>$, $<$ or $=$ to complete the statements.

- a) 12 cm = 120 mm c) 300 m > 3,000 cm
- b) 4 m > 40 cm d) 0.6 m = 600 mm

- 6 Find the area of each shape. Give your answers in cm^2

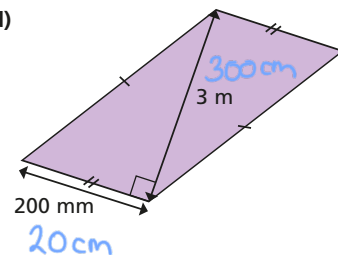
The diagrams are not drawn to scale.

a)



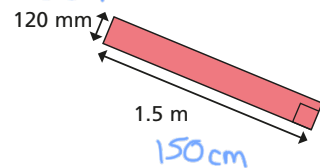
12,000 cm^2

d)



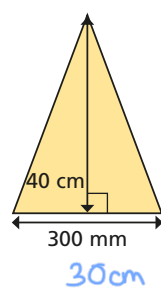
6,000 cm^2

b) 12 cm



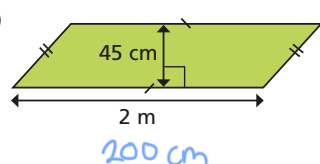
1,800 cm^2

e)



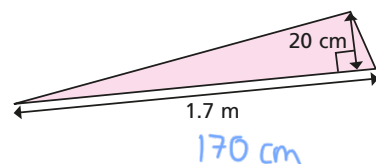
600 cm^2

c)



9,000 cm^2

f)



1,700 cm^2

- 7 A circle has a radius of 60 cm.

Use $\pi = 3.14$, to work out the circumference of the circle.

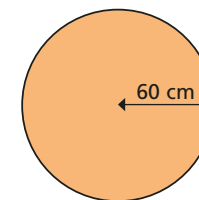
Give your answer in metres.

$$C = \pi \times d$$

$$r = 60 \text{ cm}$$

$$d = 120 \text{ cm} = 1.2 \text{ m}$$

$$C = 3.14 \times 1.2$$



3.768 m

- 8 The perimeter of a rectangle is 3.7 m.

One side of the rectangle is 42 cm long.

Work out the length of the other side of the rectangle.



$$3.7 - (0.42 + 0.42) = 2.86$$

$$2.86 \div 2 = 1.43$$

1.43 m

- 9 a) How many millimetres are there in 1 kilometre?

$$1 \text{ km} = 1,000 \text{ m} = 100,000 \text{ cm} = 1,000,000 \text{ mm}$$

1,000,000

- b) A rectangular field measures 600 m by 2 km.

Convert the side lengths to mm and find the area of the field in mm^2

Give your answer in standard form.

$$600 \text{ m} = 60,000 \text{ cm} = 600,000 \text{ mm}$$

$$2 \text{ km} = 2,000,000 \text{ mm}$$

$$600,000 \times 2,000,000 = 1,200,000,000,000$$

$$= 1.2 \times 10^{12}$$

$1.2 \times 10^{12} \text{ mm}^2$