



Year 10 Maths B Homework Sheet No.03

To be completed on loose-leaf paper.

Due date: _____

1 [Length units] Select the best unit (mm, cm, m, km) to measure:

- a the width of a DVD _____
- b the height of a person _____

2 [Length units] Select the best unit (mm, cm, m, km) to measure:

- a the length of the MCG _____
- b the distance from Alice Springs to Canberra _____

For **3–5**, convert the length to the unit indicated.

3 [Length units] a 150 mm = ___ cm b 700 cm = ___ m

4 [Convert length units] a 2.7 km = ___ m b 0.250 m = ___ cm

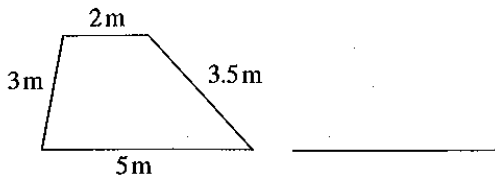
5 [Convert length units] a 0.457 m = ___ mm
b 73260 mm = ___ m

6 [Estimate lengths] Estimate the length of:

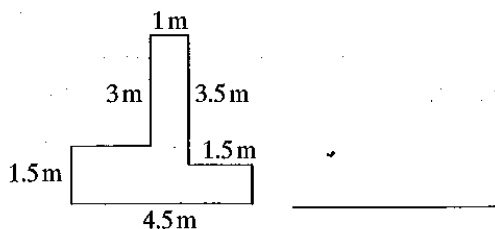
- a a textbook _____
- b a medium-size car _____

For **7–10**, calculate the perimeter.

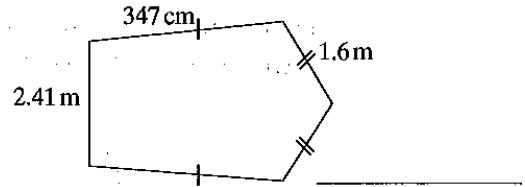
7 [Perimeter]



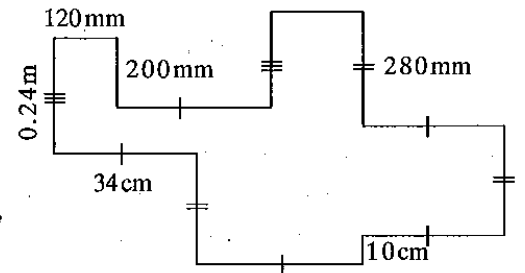
8 [Perimeter] (Hint: some of the measurements are missing.)



9 [Perimeter]



10 [Perimeter application]



11 [Perimeter application]

Max has a rectangular back yard with a perimeter of 26 m. If the yard is 9 m in length, what is the width? (Hint: draw a diagram.)

12 [Perimeter application]

Aisha is making a square photo frame. If each side is 23.4 cm long, calculate the perimeter of the frame.

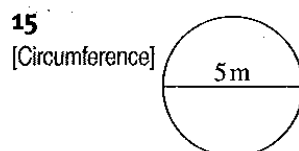
13 [Perimeter application]

The width of a kennel is 90 cm and the length is 1.5 m. Find the perimeter of the kennel. (Hint: draw a diagram.)

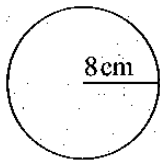
14 [Perimeter application]

Scott walked around the perimeter of a national park. He walked 2.4 km in the morning and 1.78 km in the afternoon, but still had 3.6 km to go. What is the perimeter of the park?

For **15–16**, calculate the circumference (to 1 decimal place). Use $\pi = 3.14$.



16
[Circumference]



17 Find the circumference of a circle of
[Circumference] radius 5.4 m.

18 A trainer wheel on a child's bike has a
[Circumference] diameter of 10 cm. Find the circumference
of the wheel. (Hint: draw a diagram.)

19 Select the best unit (mm^2 , cm^2 , m^2
[Area units] or km^2) to measure the area of:

- a a sheet of paper b an eraser

20 Select the best unit (mm^2 , cm^2 , m^2
[Area units] or km^2) to measure the area of:

- a the classroom floor b a country

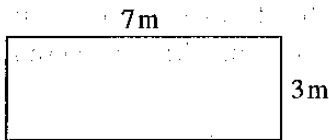
For 21–22, convert each area to the unit indicated.

21 a $7.8 \text{ cm}^2 =$ _____ mm^2
[Convert
area units] b $2.1 \text{ m}^2 =$ _____ mm^2

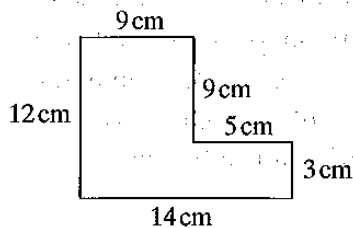
22 a $400 \text{ mm}^2 =$ _____ cm^2
[Convert
area units] b $36\,000 \text{ cm}^2 =$ _____ m^2

For 23–27, calculate the area.

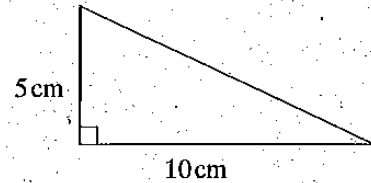
23
[Area
rectangle]



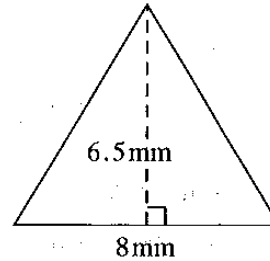
24
[Composite
area]



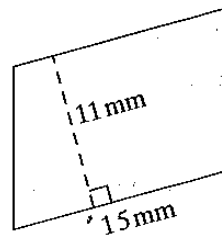
25
[Area of
triangle]



26
[Area of
triangle]



27
[Area of
triangle]



28
[Area of
parallelogram]

Lian wants to plant lawn in her
backyard, which is 12 m long and 4 m
wide. Calculate the area of lawn.
(Hint: draw a diagram.)

29
[Area
application]

Nick has made a triangular sign to
support his local football team. The
sign has a base of 60 cm and a height of
30 cm. Calculate the area of the sign in
square centimetres.

30
[Area
application]

What is the area of Nick's sign in square
metres?