

## Units and simple conversions

Name .....

<p>1. Write the meaning of each of the following prefixes:</p> <p>a) kilo-</p> <p>b) Mega-</p> <p>c) Giga-</p> <p>d) milli-</p> <p>e) centi-</p> <p>2. Write the full names of these abbreviated units:</p> <p>a) m</p> <p>b) cm</p> <p>c) kL</p> <p>d) kg</p> <p>e) t</p> <p>f) h</p> <p>g) s</p> <p>h) min</p> <p>i) mg</p> <p>3. Write the conversion factors between each of the following pairs of units:</p> <p>a) cm – mm</p> <p>b) m – km</p> <p>c) cm – m</p> <p>d) mg – g</p> <p>e) h – min</p> <p>f) L – mL</p> <p>g) L - ML</p>	<p>2. Complete the following:</p> <p>a) 3 m = ..... mm</p> <p>b) 40 cm = ..... m</p> <p>c) 60 g = ..... kg</p> <p>d) 60 g = ..... mg</p> <p>e) 5 h = ..... min</p> <p>f) 420 s = ..... min</p> <p>g) 0.002 L = ..... mL</p> <p>h) 67.3 mm = ..... m</p> <p>i) 12.5 kg = ..... g</p> <p>j) 68 kg = ..... t</p> <p>k) 0.2 ML = ..... L</p> <p>l) 6 days = ..... h</p> <p>m) 0.004 cm = ..... mm</p> <p>n) 2.5 mm = ..... m</p> <p>o) 74 km = ..... m</p> <p>p) 2.8 km = ..... m</p> <p>q) 50 Mt = ..... t</p> <p>r) 2 mL = ..... L</p> <p>s) 12 mm = ..... cm</p> <p>t) 3000 s = ..... min</p> <p>4. Find the area of a 2 m by 3 m rectangle in <math>\text{cm}^2</math>.</p>
---	--

# Revision Sheet M1-5

Name .....

Show working on the back of the sheet for the questions marked with a \*.

1. Write the name and abbreviation for the metric unit which is closest to each of the following: (3Ma)

the area of two football fields .....

the volume of a small loaf of bread .....

the mass of a lettuce .....

2. 200 m = ..... km = ..... cm

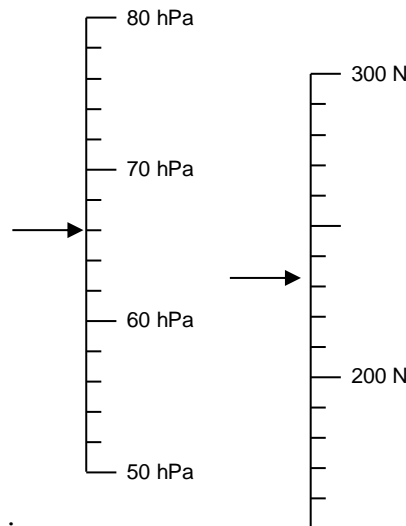
3. 0.5 L = ..... mL = ..... cm<sup>3</sup>

4. Read the scale on the left. ....

5. Read the scale on the right. ....

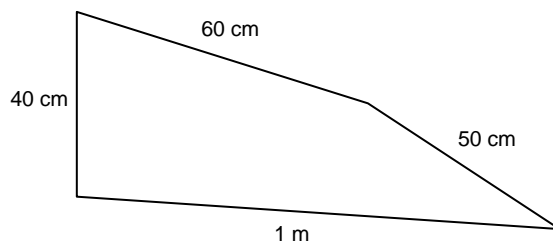
6. Estimate the mass of an average domestic cat .....

7. Measure the length of this line to the nearest millimetre .....



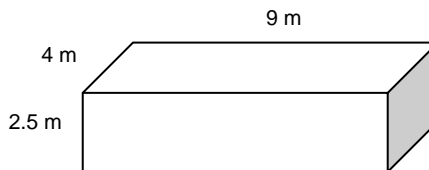
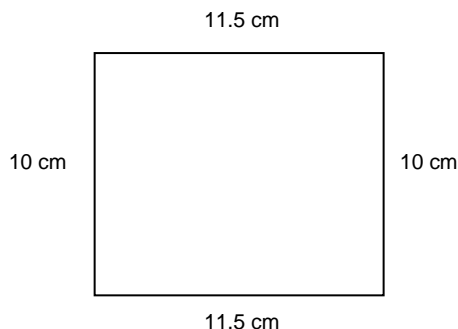
8. \*Estimate the area of the floor of the room you are in .....

9. \*Find the distance around the outside of the quadrilateral below .....



10. \*Find the circumference of a circle if its diameter is 2 m .....

11. \*Calculate the area of the rectangle below .....



12. \*Calculate the volume of the rectangular prism above .....

# Answers

## Review Sheet Level 4 Measurement

Show working on the back of the sheet for the questions marked with a \*.

Write the name and abbreviation for the metric unit which is closest to each of the following.

1. Area of two football fields . . . **hectare, ha** . . . . .

2. Volume of a small loaf of bread . . . . . **litre, L** . . . . .

3. Mass of a lettuce . . . **kilogram, kg** . . . . .

4.  $200\text{ m} = \dots \mathbf{0.2} \dots \text{ km} = \dots \mathbf{20\ 000} \dots \text{ cm}$

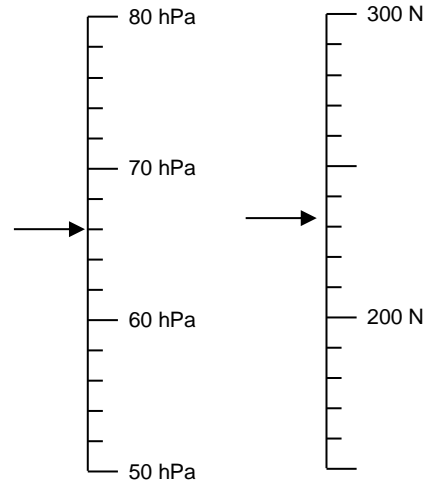
5.  $0.5\text{ L} = \dots \mathbf{500} \dots \text{ mL} = \dots \mathbf{500} \dots \text{ cm}^3$

6. Read the scale on the left. . . **66 hPa** . . . .

7. Read the scale on the right. . . **231-233 N** . . . .

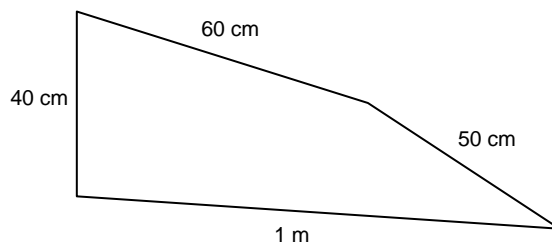
8. Estimate the mass of an average domestic cat . . . **2-10 kg** . . . .

9. Measure the length of this line to the nearest millimetre . . . **93 mm** . . . .



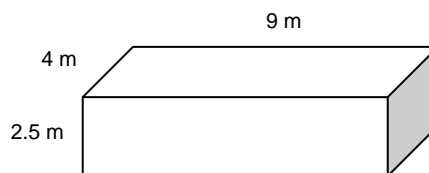
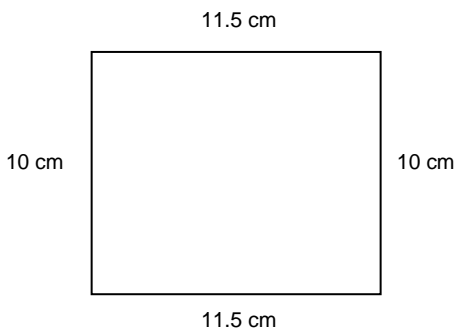
10. Estimate the area of the floor of this room . . . **30-120 m<sup>2</sup>** . . . .

11. Find the distance around the outside of a quadrilateral below . . . **250 cm** . . . .



12. Find the circumference of a circle if its diameter is 2 m . . . . **6.28 m** . . . .

13. Calculate the area of the rectangle below . . **115 cm<sup>2</sup>** . . . .

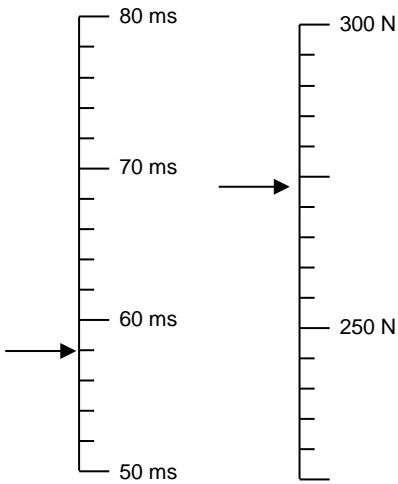


14. Calculate the volumes of the rectangular prism above . . . **90 m<sup>3</sup>** . . . .

# Revision Sheet 4M6

Name .....

Show working on the back of the sheet for the questions marked with a \*.

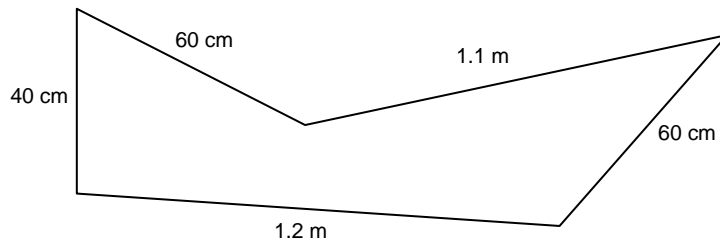


- Write the name and abbreviation for the metric unit which is closest to each of the following:  
 the length of a cow's leg .....  
 the volume of a cow .....  
 the mass of a cow .....
- 200 g = ..... kg = ..... mg
- 600 cm<sup>3</sup> = ..... mL = ..... L
- Read the scale on the left. ....
- Read the scale on the right. ....

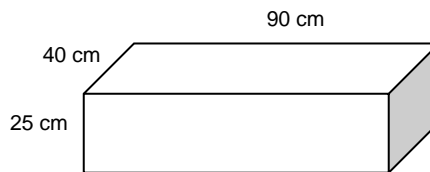
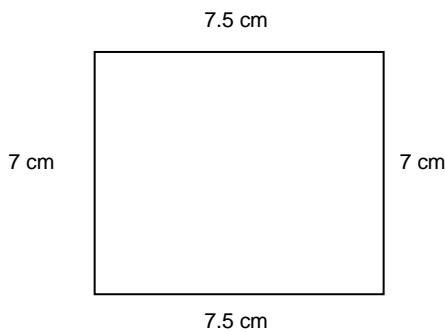
- Estimate the volume of your right foot .....
- Measure the length of this line to the nearest tenth of a centimetre .....



- Estimate the mass of a new-born baby .....
- \*Find the distance around the outside of the shape below .....



- \*Find the circumference of a circle if its diameter is 10 m .....
- \*Calculate the area of the rectangle below .....



- \*Calculate the volume of the rectangular prism above .....

# Revision Sheet 4M7

Name .....

Show working on the back of the sheet for the questions marked with a \*.

1. Write the meaning of the following abbreviations:

milli-..... centi-..... kilo-.....

2. Write the name and abbreviation for the metric unit which is closest to:

the area of a finger nail .....

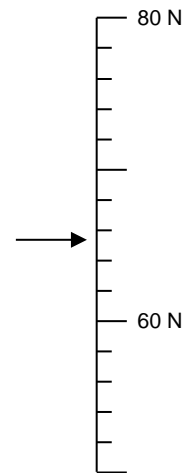
the volume of a wardrobe .....

the time needed to walk 100 m .....

3.  $40 \text{ ha} = \dots\dots\dots \text{ m}^2 = \dots\dots\dots \text{ km}^2$

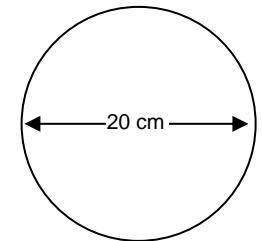
4. Convert 470 3CM to litres .....

5. Read the scale to the right .....

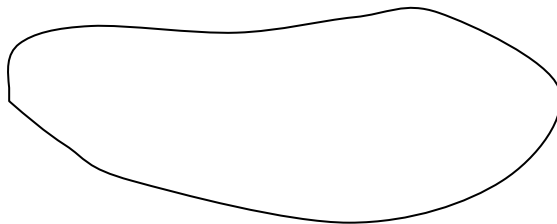


6. Find the perimeter of a rectangle 12 m by 8 m .....

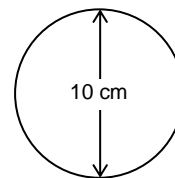
7. \* Find the circumference of the circle to the right .....



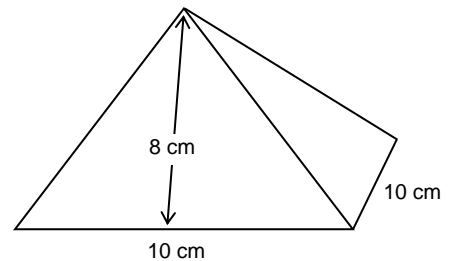
8. Draw a rectangle around this shape to find its approximate area .....



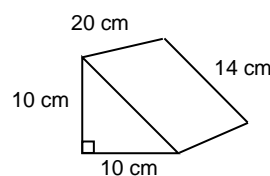
9. \* Find the area of this circle .....



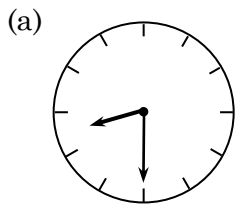
10. \* Calculate the surface area of this pyramid .....



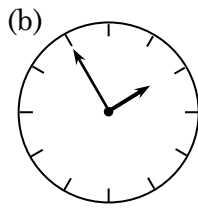
11. \* Calculate the volume of this prism. ....



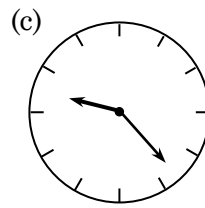
1. What is the time to the nearest minute on each of these clocks?



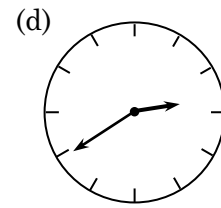
.....



.....



.....



.....

2. Write the sequence of the months and the number of days in each.

3. (a) Use the calendar below to find what day April 17 was in 2004 .....

APRIL 2004						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

(b) What date was the third Tuesday in April that year? .....

4. This is part of a train timetable:

Chelmsford	6:35	7:05	7:35	7:50	8:05
Brentwood	6:53	7:23	7:53	8:08	8:23
Romford	7:02	7:32	8:02	8:17	8:31
Ilford	7:12	7:42	8:12	8:27	8:42
Bethnal Green	7:25	7:55	8:25	8:40	8:55
Liverpool Street	7:34	8:04	8:34	8:49	9:04

(a) What time does the 7:23 from Brentwood arrive at Bethnal Green? .....

(b) How long does the 8:05 take to get from Chelmsford to Ilford? .....

(c) Which train would you need to get from Romford to catch the 8:00 from Liverpool Street to Epping? .....

# Revision Sheet 7M1

Name . . . . .

Show working on the back of the sheet for the questions marked with a \*.

1. Write the name and abbreviation for the metric unit which is closest to each of the following:

the area of the roof of a small car . . . . .

the volume of a guinea pig . . . . .

the mass of a litre of water . . . . .

the distance one can walk in 10 minutes . . . . .

the area of a finger nail . . . . .

the thickness of a slice of bread . . . . .

2. 200 m = . . . . . km = . . . . . cm

3. 0.5 L = . . . . . mL = . . . . . 3CM

4. 1.3 kg = . . . . . g = . . . . . t

5. Estimate the mass of an average domestic cat . . . . .

6. Estimate the mass of a cow . . . . .

7. Estimate the mass of a bus . . . . .

8. Measure the length of this line to the nearest millimetre . . . . .



9. \* Estimate the area of the floor of the room you are in . . . . .

10. Estimate the volume of a car . . . . .

11. Estimate the height of a fully grown tree . . . . .

# Revision Sheet 10M1

Name .....

Show working on the back of the sheet for the questions marked with a \*.

1. Write the name and abbreviation for the metric unit which is closest to:

the area of a finger nail .....

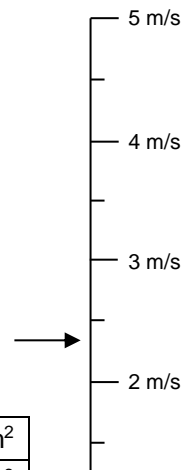
the volume of a wardrobe .....

2. Read the scale to the right .....

3. Find the perimeter of a rectangle 12 m by 8 m .....

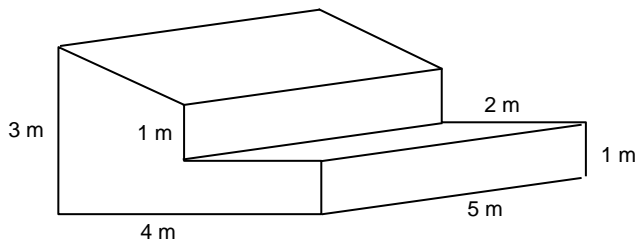
4. Complete the following table.

cm <sup>2</sup>	4 m <sup>2</sup>	ha	km <sup>2</sup>
L	mL	cm <sup>3</sup>	0.04 m <sup>3</sup>



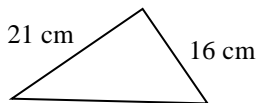
5. \* Find the surface area of a cylinder with diameter 2 m and height 8.5 m .....

6. \* Find the volume of this shape .....

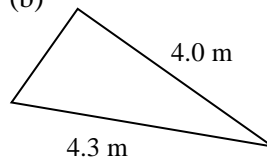


7. \* Find the length of the third side of these two right-angle triangles .....

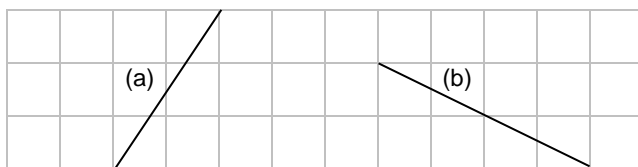
(a)



(b)

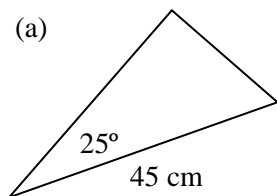


8. Find the gradient of each of the following lines .. (a) ..... (b) .....

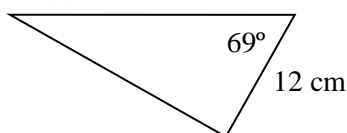


9. \* Find all the unmarked sides and angles in the following right-angle triangles.

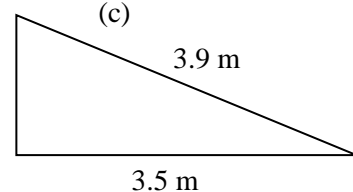
(a)



(b)



(c)





Name ..... Class .....

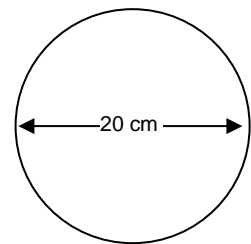
### Review Sheet Level 2 Measurement

Show working on the back of the sheet for the questions marked with a \*.

Write the name and abbreviation for the metric unit which is closest to each of the following.

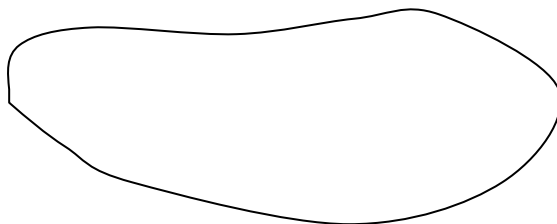
- 1. Area of two football fields .....
- 2. Volume of a wardrobe .....
- 3. Time needed to walk 100 m .....
- 4.  $40 \text{ ha} = \dots\dots\dots \text{ m}^2 = \dots\dots\dots \text{ km}^2$
- 5. Convert 6 hours 21 minutes to a decimal fraction of an hour .....

- 6. Find the perimeter of a rectangle 12 m by 8 m .....

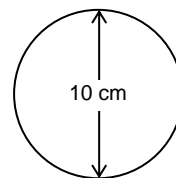


- 7. \* Find the circumference of the circle to the right .....

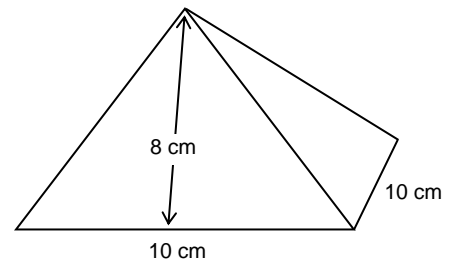
- 8. Draw a rectangle around this shape to find its approximate area .....



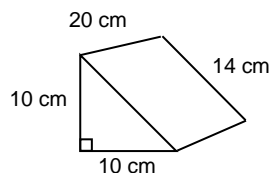
- 9. \* Find the area of this circle .....



- 10. \* Calculate the surface area of this pyramid .....



- 11. \* Calculate the volume of this prism. ....



# Answers

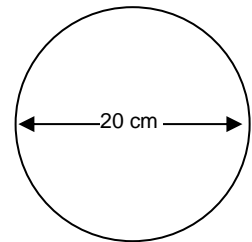
## Review Sheet Level 2 Measurement

Show working on the back of the sheet for the questions marked with a \*.

Write the name and abbreviation for the metric unit which is closest to each of the following.

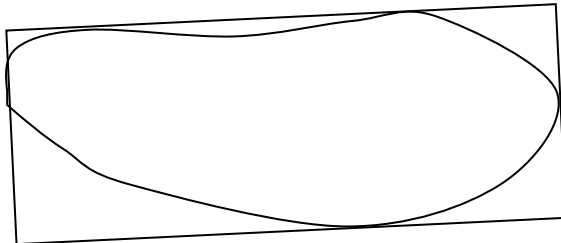
1. Area of two football fields . **hectare, ha** . . .
2. Volume of a wardrobe . . **cubic metre, m<sup>3</sup>** .
3. Time needed to walk 100 m . . **minute, min** . . .
4. 40 ha = . . **400 000** . m<sup>2</sup> = . . . **0.4** . . . km<sup>2</sup>
5. Convert 6 hours 21 minutes to a decimal fraction of an hour . . . **6.35 h** . . . . .

6. Find the perimeter of a rectangle 12 m by 8 m . . . . **40 m** . . . .

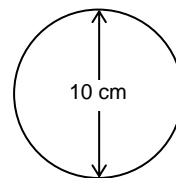


7. Find the circumference of the circle to the right . . . . **62.8 cm** . . . . .

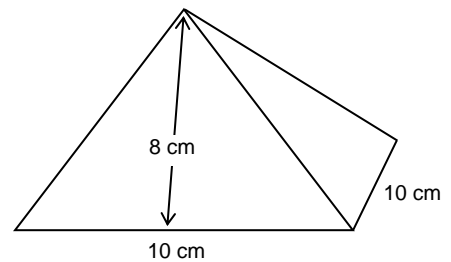
8. Draw a rectangle around this shape to find its approximate area . . **14-19 cm<sup>2</sup>** . . .



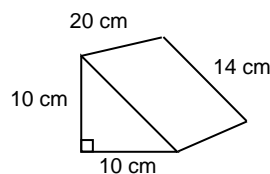
9. Find the area of this circle . . . . **78.5 cm<sup>2</sup>** . . . . .



10. Calculate the surface area of this pyramid . . **260 cm<sup>2</sup>** .



11. Calculate the volume of this prism.



. . . **1000 cm<sup>3</sup>** . .

**Perimeters, areas, volumes: basic shapes** Name .....

1. For each of the following, draw the shape, then calculate the perimeter.

a) A square with 10 cm sides

b) A 4 m by 3 m rectangle

c) A right-angle triangle with side lengths 5 cm, 4 cm and 3 cm

d) A circle with a diameter of 10 cm

e) A circle with a radius of 6 cm

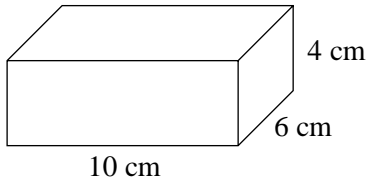
2. Use the formula to find the area of each of the shapes in Question 1. Do each one beside its diagram.

**Perimeters, areas, volumes: basic shapes**

**Name** .....

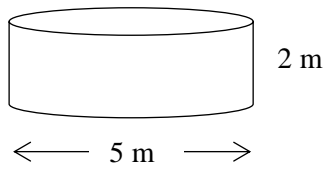
1. For each of the following shapes, label the faces, then calculate the surface area.

f)



2. For each of the shapes in Question 1, use formulae to calculate the volume.

g)

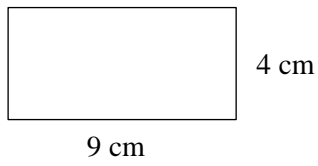


**Perimeters, areas, volumes: basic shapes**

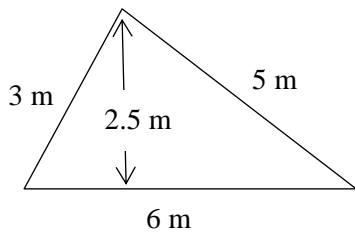
Name .....

1. Use formulae to find the areas of the following shapes.

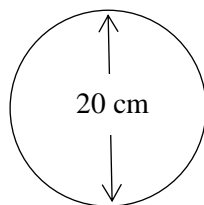
h)



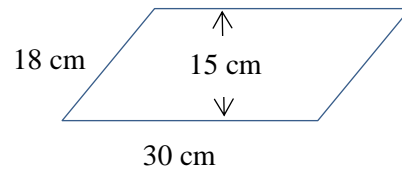
i)



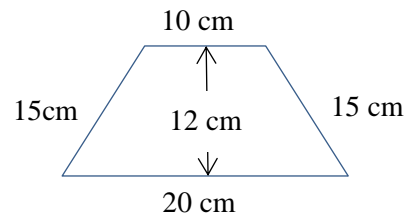
j)



k)



e)



2. A rectangle 12 m long has an area of  $75\text{m}^2$ . Write and solve an equation to find its width.

**Perimeters, areas, volumes: basic shapes**    **Name** .....

1. For each of the following, write the formula and draw a diagram to show the measurements used in the formula.

a) Circumference of a circle

b) Area of a circle

c) Area of a rectangle

d) Area of a triangle

e) Area of a parallelogram

f) Area of a trapezium

g) Area of a square

h) Volume of a prism