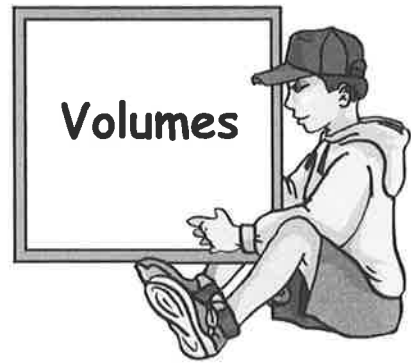


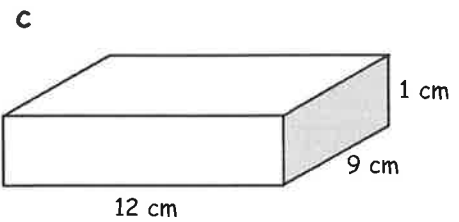
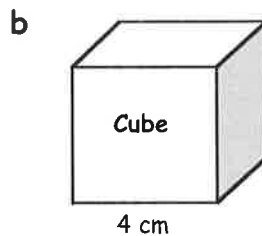
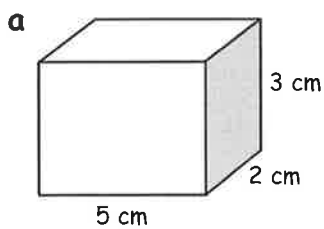
CHAPTER 12



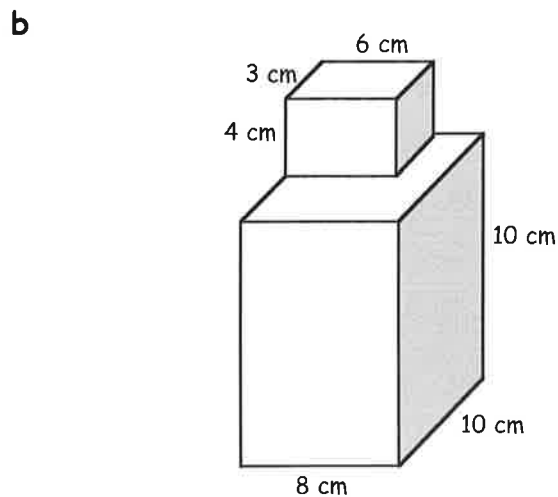
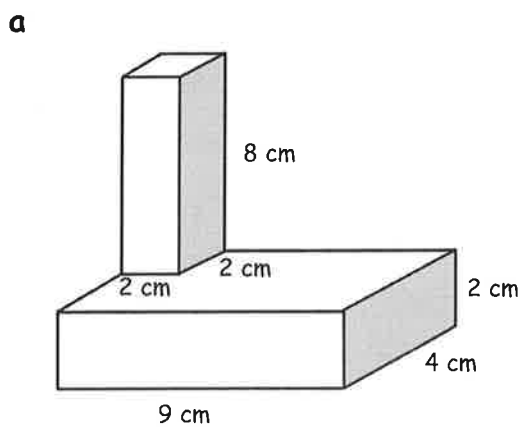
Exercise 1 Volumes of Cubes & Cuboids

1. Copy and complete :- Volume = length \times br..... \times h.....

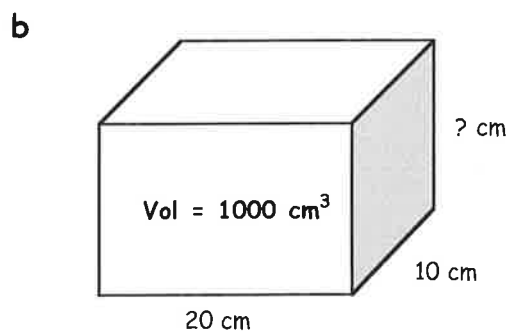
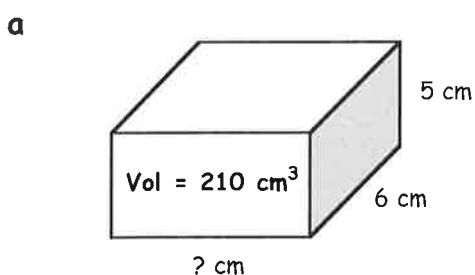
2. Use the formula to calculate the **volume** of the following cuboids :-



3. Find the total **volume** of each of the following shapes :-



4. Calculate the length of the missing edge of each of the following cuboids :-



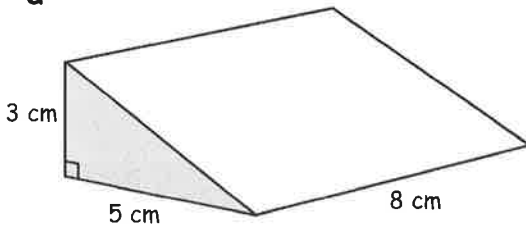
Exercise 2

Volumes of Triangular Prisms

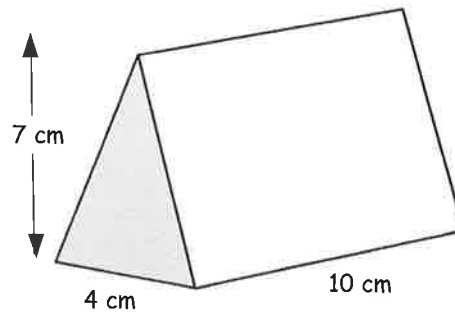


1. Calculate the volume of each prism below :-

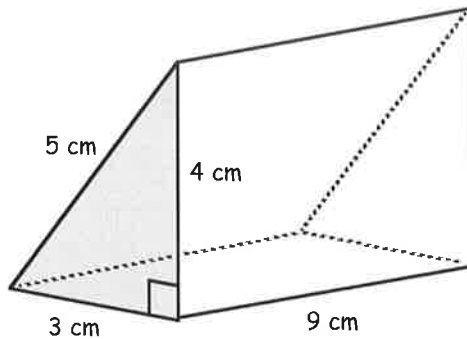
a



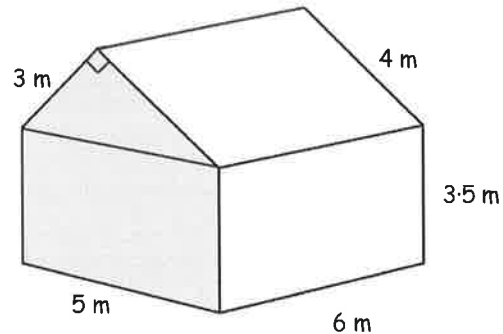
b



c



d



Exercise 3

Liquid Volume - Capacity



1. Change each of the following to millilitres :-

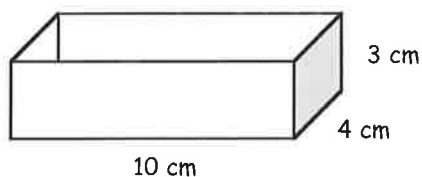
- a 3 litres b 10 litres c 1.5 litres d 10.1 litres
 e half a litre f 5.12 litres g $\frac{3}{4}$ litre h 0.02 litres.

2. Change each of the following to litres :-

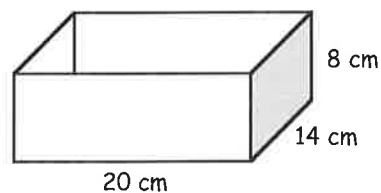
- a 8000 ml b 100 000 ml c 7500 ml d 1250 ml
 e 10010 ml f 300 ml g 50 ml h 8 ml.

3. Find the capacity (in millilitres) of each of these containers :-

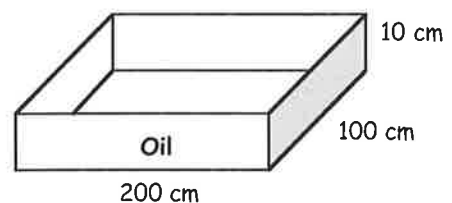
a



b



4. How many litres would it take to half fill the oil tray shown ?

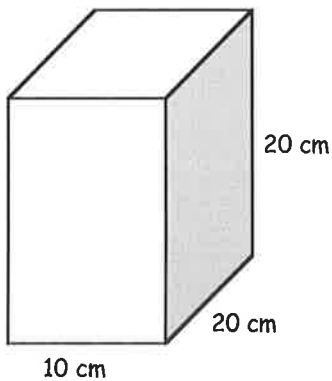


Revisit - Review - Revise Exercise 12

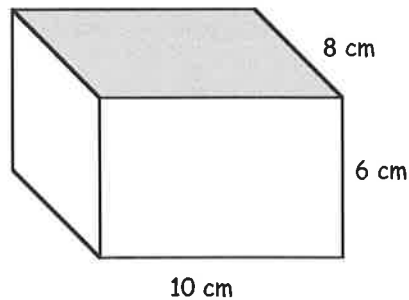


1. Find the volume of each cuboid below :-

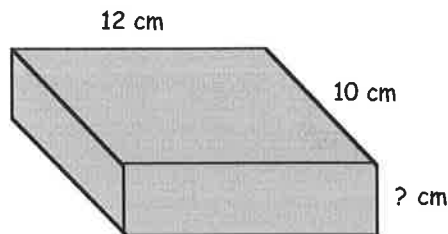
a



b



2. The volume of the cuboid shown is 420 cubic centimetres.
Find the height of the cuboid.



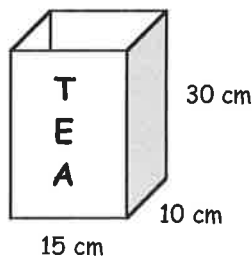
3. Change to litres :-

a 8700 ml b 40 ml.

4. Change to millilitres :-

a 7.2 litres b $\frac{4}{5}$ litre.

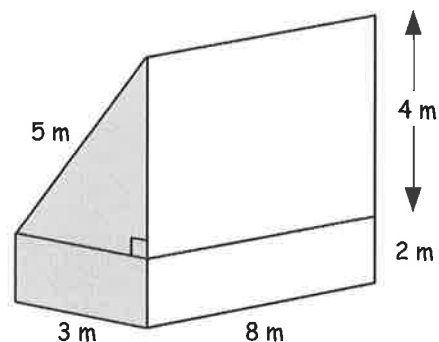
5.



Calculate how much the tea tin will hold in :-

a cm^3 b litres.

6. A large metal bread bin is to be built on top of a bakery for advertising.
The bread bin consists of a cuboid and a triangular prism.
Calculate the volume of the bread bin.



Cumulative Ex 3



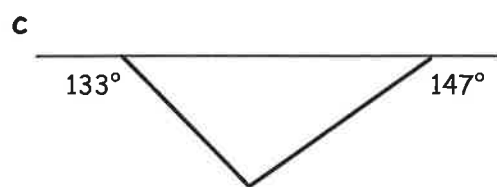
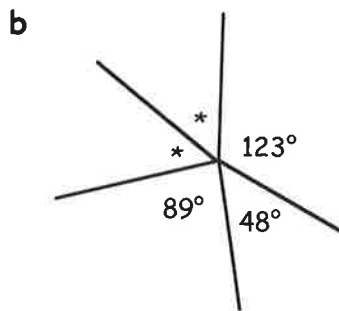
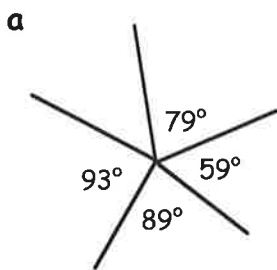
1. Round each of these numbers to the number of decimal places in the brackets :-
 a 1.8552 (2) b 6.3401 (1) c 66.765 (2) d 11.34551 (3).

2. Round each number in question 1 to :-

(i) one significant figure (ii) 3 significant figures.

3. Find :-
- | | | | | | |
|---|-------------------|---|-------------------|---|-------------------|
| a | 154×30 | b | 654×4000 | c | $65000 \div 50$ |
| d | $14800 \div 2000$ | e | $4 + 3 \times 2$ | f | $5600 \div 4 + 1$ |
| g | $-3 + (-4)$ | h | $-6 \times (-5)$ | i | $15 \times (-2)$ |
| j | 45% of £160 | k | 3% of £8 | l | 12.5% of 160 km. |

4. Copy and complete each diagram, filling in all the missing angles :-



5. Simplify fully :-

a $4(2x - 3) + 3(x - 5)$ b $3(3x - 5) - 2(4x - 8) - x - 1$.

6. a Find the **radius** of a circle with diameter of 15 cm.

- b Find the **radius** of a circle with circumference of 62.8 cm.



7. A water trough is in the shape of a cuboid with dimensions 100 by 50 by 80 cm.
 Find how many **litres** of water the trough will hold when full.

8. Find :- a $\frac{4}{5} + \frac{2}{3}$ b $\frac{1}{3} + \frac{1}{2} - \frac{3}{4}$ c $4\frac{1}{5} - 2\frac{1}{3}$.

9. Find the side length of a square that has the same **area** as that of the parallelogram shown.

