

1. Use your calculator to find the following.  
Answer correct to 3 significant figures

a)  $8.4 \div (9.6 - 5.7)$       b)  $20 \times (2.1 \div 5.9)$   
c)  $\frac{58}{(1.2 \times 1.3)}$                       d)  $2500 \times 1.045^3$

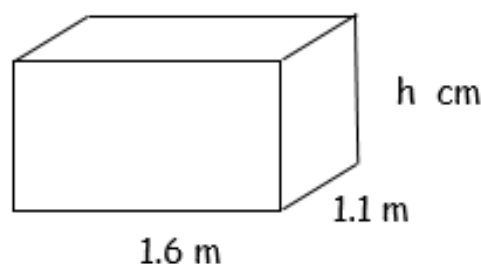


2. Calculate the height of a cube which has a volume of  $31554.496 \text{ cm}^3$ .

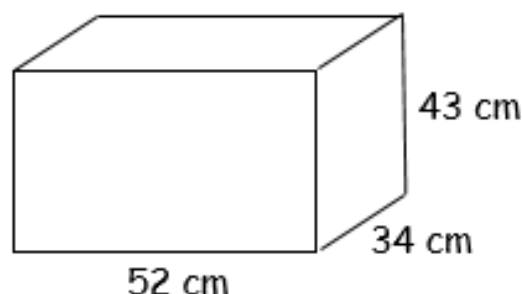
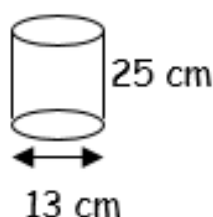


3. This tank is built to hold 1450 litres of oil.

Calculate the height of the tank.



4. A cylindrical bucket is used to fill a rectangular tank with hot water.



By calculating both the volume of the bucket and the tank, decide how many times the bucket will need to be used to fill the tank.

5. Solve these equations.

a)  $c + 3 = 12$

b)  $12a - 6 = 5 + 2a$

c)  $7d - 6 = 3 + 4d$

d)  $6(2v - 1) = 32$

e)  $\frac{4a}{5} = 7$

f)  $\frac{6f}{7} - 4 = 7$



6. Calculate (but do not use a calculator - show all working).

a) 27% of 532 kg

b)  $\frac{5}{7}$  of 294 cm

c)  $\frac{5}{6} + \frac{3}{4}$

d)  $3.5 + 6.8 \times 5$

e)  $352 \times 70$

f)  $3900 \div 600$

