

# Maths – 8 Support: Spring 1

## 1 Number – Percentages

$$50\% \text{ of } 60 = 30$$

$$25\% \text{ of } 60 = 15$$

$$10\% \text{ of } 60 = 6$$

On a calculator:  
'of' means multiply

Increase £60 by 50%

$$100\% + 50\%$$

$$60 + 30 = \text{£}90$$

Decrease £60 by 50%

$$100\% - 50\%$$

$$60 - 30 = \text{£}30$$

## 2 Shape – Perimeter and Area

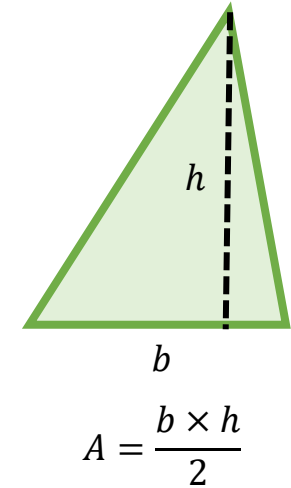
3cm

$$A = 5 \times 3 = 15\text{cm}^2$$

5cm

Perimeter: distance around edge

$$3 + 5 + 3 + 5 = 16\text{cm}$$

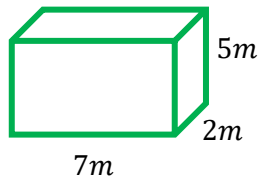


## 3 Shape – Volume

$$V = \text{length} \times \text{width} \times \text{height}$$

Cuboid

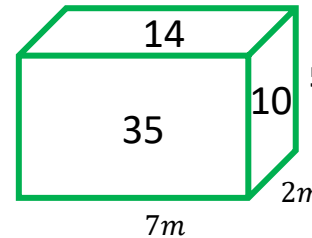
$$\begin{aligned} V &= l \times w \times h \\ &= 7 \times 2 \times 5 \\ &= 70\text{m}^3 \end{aligned}$$



## 4 Shape – Surface Area

Surface area:  
sum of the area of the faces

Cube



$$\begin{aligned} &14 + 35 \\ &+ 10 + 14 \\ &+ 35 + 10 \\ &= 118\text{m}^2 \end{aligned}$$

1	2	3	4
81	548	568	584
84 – 85	554		
88	557		