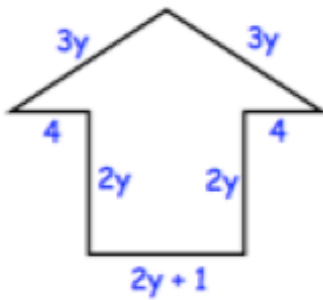


April 28th	5-a-day	Numeracy
<p>938 + 93</p> $\begin{array}{r} 938 \\ + 93 \\ \hline 1031 \end{array}$	<p>600 - 352</p> 248	
<p>347 x 7</p> 2429	<p>28 x 63</p> 1764	
<p>Each week Mrs Jones earns 25p commission on each ticket she sells for the first 100 tickets and 50p per ticket for any extra tickets she sells.</p> <p>Last week she sold 160 tickets</p> <p>Write these numbers in ascending order of size.</p> <p>28%, $\frac{3}{10}$, 0.4</p>	<p>How much did she earn?</p> $£25 + £30$ $£55$	<p>28% $\frac{3}{10}$ 0.4</p>
<p>What is the mean of these numbers:</p> <p>25 15 27 18 24 17 21 18 18 17</p>	$200 \div 10 = 20$	



Write an expression for the perimeter.

$$12y + 9$$

Expand

$$3a(a + 4)$$

$$3a^2 + 12a$$

Expand

$$5a(x - 2)$$

$$5ax - 10a$$

Work out

$$41 \times 3 = 123$$

$$4.1 \times 0.3$$

$$1.23$$

Work out

$$0.8 \times 0.8$$

$$0.8^2$$

$$0.64$$

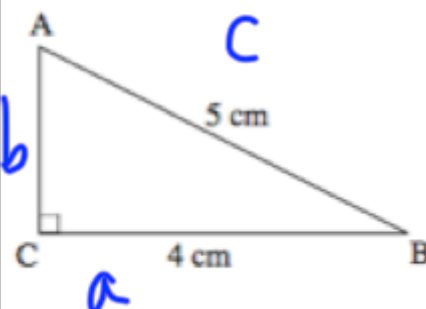
An oil drum has height 80cm and radius 10cm. Calculate the volume of the oil drum.

$$\begin{aligned} \pi \times 10^2 &= 314.159 \dots \\ 314.159 \dots \times 80 & \\ 25132.7 \text{ cm}^3 & \end{aligned}$$



Calculate the length of AC

$$\begin{aligned} 4^2 + b^2 &= 5^2 \\ 16 + b^2 &= 25 \\ b^2 &= 9 \\ b &= 3 \text{ cm} \end{aligned}$$



April 28

5-a-day

Higher

What is the size of each interior angle in a regular octagon?

$$135^{\circ}$$

Each exterior angle of the regular octagon?

$$45^{\circ}$$

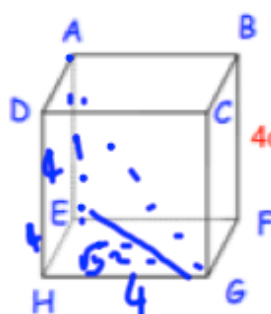
A regular polygon has interior angle 178°

Work out how many sides it has.

$$\text{Exterior } 2^{\circ}$$

$$360 \div 2$$

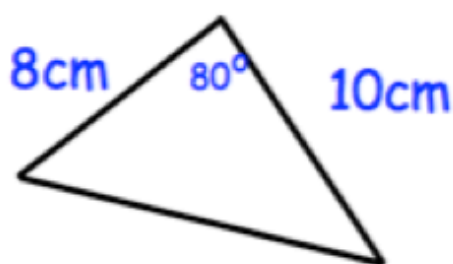
$$180 \text{ sides}$$



$$\begin{aligned} EG &= \sqrt{32} \\ 4^2 + 4^2 &= x^2 \\ x &= \sqrt{32} \end{aligned}$$

Shown is a cube. Calculate length AG.

$$\begin{aligned} (\sqrt{32})^2 + 4^2 &= AG^2 \\ 32 + 16 &= AG^2 \\ AG &= \sqrt{48} = 4\sqrt{3} \end{aligned}$$



Calculate the area of the triangle.

$$\begin{aligned} \frac{1}{2} ab \sin C \\ \frac{1}{2} \times 8 \times 10 \times \sin 80 \\ 40 \sin 80 &= 39.4 \text{ cm}^2 \end{aligned}$$

The volume of a sphere is 100 cm^3

What is its radius?

$$\frac{4}{3} \pi r^3 = 100$$

$$4\pi r^3 = 300$$

$$\pi r^3 = 75$$

$$r^3 = 23.87 \dots$$

$$r = 2.88 \text{ cm (2dp)}$$