

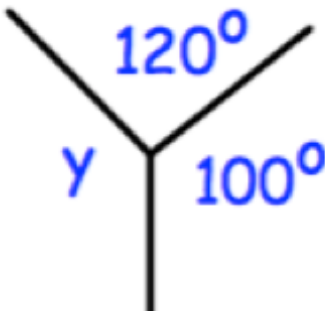


January 15th	5-a-day	Numeracy
<p>Work out</p> <p><math>6 \times 4 + 1</math>      25</p>	<p>Work out</p> <p><math>40 - 10 \times 2</math>      20</p>	
<p>Simplify</p> <p><math>a + a + a + a</math>      4a</p>	<p>Simplify</p> <p><math>4a + 8c + 5a - 3c</math>      9a + 5c</p>	
 <p>cone</p> <p>Name this solid</p>	 <p>cylinder</p> <p>Name this solid</p>	
<p>Mary has £400</p> <p>She gives 10% to her sister.      £40</p> <p>She gives two fifths to her mum.      £160</p> <p>How much does she have left?</p>	<p>£400 - £200</p> <p>£200</p>	
 <p>120°</p> <p>y</p> <p>100°</p> <p>126</p> <p>100</p> <p>220</p>	<p>360</p> <p>- 220</p> <p>140°</p>	

James is going on holiday in New York. James changes £400 into dollars (\$).

The exchange rate is £1 = \$1.50

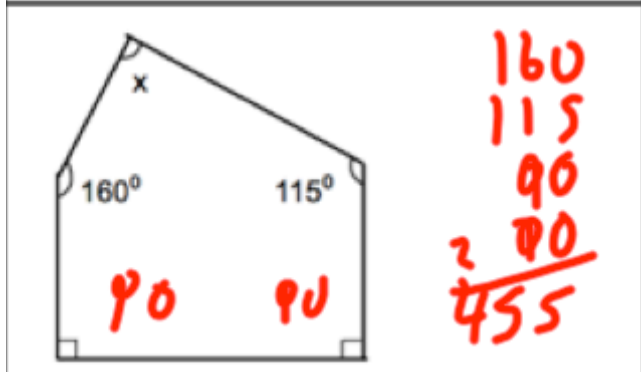
How many dollars does he receive?

$$£400 \times 1.5 = \$600$$

$$\frac{3}{4} + \frac{1}{12}$$

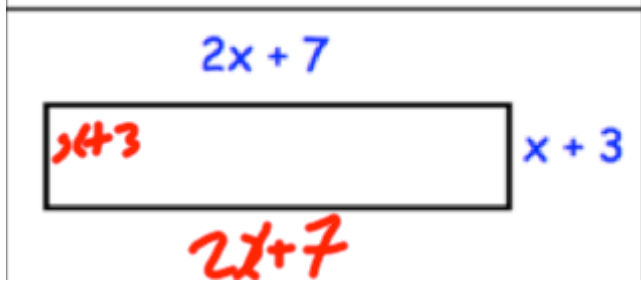
$$\frac{9}{12} + \frac{1}{12} = \frac{10}{12}$$

$$= \frac{5}{6}$$



Work out x.

$$455 - 360 = 95$$



Find an expression for the perimeter.

$$6x + 20$$

Make v the subject

$$t = \frac{v}{4} + 1$$

$$t - 1 = \frac{v}{4}$$

$$4t - 4 = v$$

January 15

5-a-day

Higher

Expand and simplify

$$(y + 2)(y - 3) + y + 5$$

$$y^2 - y - 6 + y + 5$$

$$y^2 - 1 \quad \checkmark$$

$$(y - 1)(y + 1) \quad \checkmark$$

Matt used to weigh 80kg.  
He now weighs 76kg.

Work out the percentage change.

$$\frac{4}{80} \times 100 \quad \frac{1}{20} \times 100 \quad \nearrow 5\%$$

Work out the reciprocal of 5.

$$\frac{1}{5}$$

Work out the reciprocal of 0.4.

$$\frac{2}{5} \rightarrow \frac{5}{2} \\ 2\frac{1}{2}$$

Work out

$$(2.3 \times 10^8) \times (2 \times 10^5)$$

$$4.6 \times 10^{13}$$

$$\frac{-11 \pm \sqrt{121 - (4 \times 3 \times 9)}}{6}$$

$$\frac{-11 \pm \sqrt{121 - 108}}{6} \quad \frac{-11 \pm \sqrt{13}}{6}$$

Solve using the quadratic formula

$$3x^2 + 11x + 9 = 0$$

$$a \quad b \quad c$$

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$\frac{-11 + \sqrt{13}}{6} \quad \text{or} \quad \frac{-11 - \sqrt{13}}{6}$$

$$x = -1.23 \quad \text{or} \quad x = -2.43$$