


January 27th	5-a-day	Numeracy
<p>Draw a pentagon</p> 	<p>What is the name of a 10 sided shape?</p> <p>decagon</p>	
<p>If $15 \times 34 = 510$</p> <p>Use that information to work out:</p> <p>150×34</p> <p>5100</p>	<p>30×34</p> <p>1020</p> <p>1.5×34</p> <p>51</p>	
<p>What is 9 squared?</p> <p>81</p>	<p>What is the square root of 64?</p> <p>8</p>	
<p>List the first five multiples of 15</p> <p>15 30 45 60 75</p>	<p>List the factors of 15</p> <p>1 3 5 15</p>	
<p>Anna has a mobile phone.</p> <p>Text messages cost 3p each. Calls cost 5p per minute.</p> <p>She also has to pay £10 each month.</p>	<p>In September, Anna:</p> <ul style="list-style-type: none"> - made 100 minutes of calls - sent 70 text messages. <p>How much was her bill in September?</p> <p>£17.10</p>	<p>£5</p> <p>£2.10</p>

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Foundation

Paul has 84p
Ian has £2.30

Paul gives Ian some money so that they have the same amount.

How much did Paul give Ian?

$$\begin{array}{r} 84 \\ + 230 \\ \hline 314 \end{array}$$

$$2 \overline{) 3.14} \begin{array}{r} 1.57 \\ \underline{2.00} \\ 1.14 \\ \underline{1.14} \\ 0 \end{array}$$

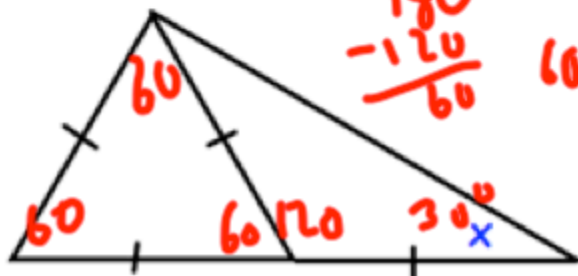
$$\begin{array}{r} 1.57 \\ - 0.44 \\ \hline 0.73 \end{array}$$

73p

There are 7 girls and 13 boys in a class.

What percentage of the class are girls?

$$\frac{7}{20} = \frac{35}{100} = 35\%$$



Find x

$$180 - 120 = 60$$

$$60 \div 2 = 30$$

30°

Solve $8y + 2 = 20 + 6y$

$$\begin{array}{r} -6y \quad -6y \\ 2y + 2 = 20 \\ 2y = 18 \end{array}$$

$$y = 9$$

$$\begin{array}{r} 25 \\ \underline{5} \\ 20 \end{array}$$

$$25 = 5 \times 5$$

Find the LCM of 25 and 15.

$$\begin{array}{l} 25 \quad 50 \quad \boxed{75} \\ 15 \quad 30 \quad 45 \quad 60 \quad \boxed{75} \end{array}$$

75

$$\begin{array}{r} 25 \\ \underline{3} \\ 20 \end{array}$$

$$15 = 3 \times 5$$

$$25 = 5 \times 5$$

$$3 \times 5 \times 5 = 75$$

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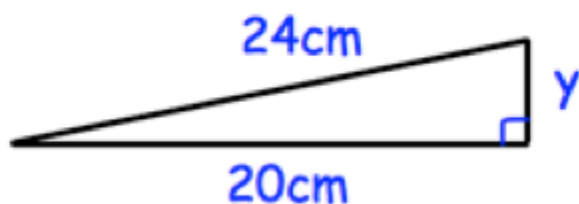
Higher

Mrs Jenkins buys a car for £3400.
She sells it for £3800.

Work out her percentage profit.

$$\frac{400}{3400} \times 100$$

11.76%



Find y

$$\sqrt{24^2 - 20^2}$$

13.27cm

Solve the simultaneous equations

$$4x + 5y = 25$$

$$x - y = 4 \quad \times 5$$

$$\begin{array}{r} 5x - 5y = 20 \\ + \quad 4x + 5y = 25 \\ \hline 9x = 45 \\ x = 5 \quad y = 1 \end{array}$$

Prove

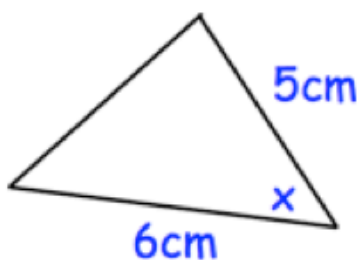
$$(n + 1)^2 - (n - 1)^2 + 4$$

is always even, if n is a positive integer.

$$n^2 + 2n + 1 - (n^2 - 2n + 1) + 4$$

$$4n + 4$$

$2(2n + 2) \therefore$ always even as even \times \square = even.



The area of the triangle is 8cm^2 .
Calculate x.

$$\frac{1}{2} \times 5 \times 6 \times \sin x = 8$$

$$\sin x = \frac{8}{15}$$

$$x = 32.23^\circ$$