

January 31st	5-a-day	Numeracy
<p>Write 9.15pm in 24 hour time</p> <p style="text-align: center; color: red; font-size: 2em;">21:15</p>	<p>Write 15:25 in 12 hour time</p> <p style="text-align: center; color: red; font-size: 2em;">3:25pm</p>	
<p>Work out $\frac{1}{4}$ of 36</p> <p style="text-align: center; color: red; font-size: 2em;">9</p>	<p>Work out $\frac{3}{4}$ of 36</p> <p style="text-align: center; color: red; font-size: 2em;">27</p>	
<p>A train should have arrived at 14:40</p> <p>It arrived 1 hour 45 minutes late.</p> <p>What time did it arrive?</p>	<p style="color: red; font-size: 1.5em;">14:40 ↘ -1hr</p> <p style="color: red; font-size: 1.5em;">13:40 ↘ 40 mins</p> <p style="color: red; font-size: 1.5em;">13:00 ↘ 5 mins</p> <p style="border: 1px solid red; padding: 5px; color: red; font-size: 1.5em; display: inline-block;">12:55</p>	
<p>70%, $\frac{3}{4}$, 0.6, $\frac{2}{3}$</p> <p>Arrange in order from smallest to largest</p>	<p style="color: red; font-size: 1.5em;">0.6 $\frac{2}{3}$ 70% $\frac{3}{4}$</p>	
<p>The cost of a taxi journey is worked out by the rule.</p> <p style="margin-left: 20px;">£2 plus 50p per mile</p>	<p>Work out the cost of a 10 mile journey.</p> <p style="color: red; font-size: 1.5em;">50p × 10 = £5</p> <p style="color: red; font-size: 1.5em;">£2 + £5 = <u>£7</u></p>	

January 31

5-a-day

Foundation

Solve

$$5(x + 3) = 35$$

$$5x + 15 = 35$$

$$5x = 20 \quad x = 4$$

Solve

$$8x + 1 = 6x + 13$$

$$2x + 1 = 13$$

$$2x = 12 \quad x = 6$$

Expand

$$5(x + 3)$$

$$5x + 15$$

Expand

$$2y(y + 5)$$

$$2y^2 + 10y$$

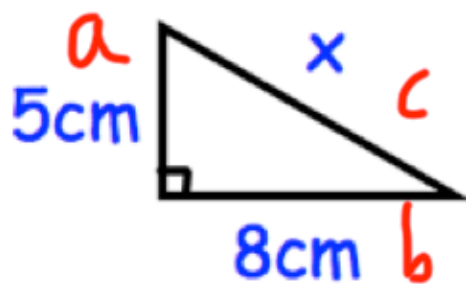
Share \$40 in the ratio 2:3

$$2 + 3 = 5$$

$$\$40 \div 5 = 8$$

$$8 \times 2 = \$16$$

$$8 \times 3 = \$24$$



$$a^2 + b^2 = c^2$$

$$5^2 + 8^2 = x^2 \quad 9.43 \text{ cm}$$

$$25 + 64 = x^2 \quad \uparrow$$

$$89 = x^2 \quad x = \sqrt{89}$$

Find the area of a circle with radius 4cm.

$$\pi \times 4^2$$

$$\pi \times 16 = 16\pi \text{ cm}^2$$

$$\text{or} \quad 50.27 \text{ cm}^2$$

January 31

5-a-day

Higher

$$4\frac{1}{4} \times 2\frac{3}{5}$$

$$\frac{17}{4} \times \frac{13}{5} = \frac{221}{20}$$

$$11\frac{1}{20}$$

The length of a side of an equilateral triangle is 4.52, correct to 3 significant figures.

Work out the lowest possible perimeter of the triangle.

$$4.515 \times 3$$

$$13.545 \text{ cm}$$

Simplify

$$\frac{2x^2 - 3x - 20}{x^2 - 16}$$

$$\frac{(2x+5)(x-4)}{(x-4)(x+4)} = \frac{2x+5}{x+4}$$

Simplify
 $\sqrt{800}$

$$\sqrt{400} \times \sqrt{2}$$

$$20\sqrt{2}$$

Simplify

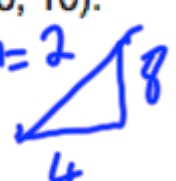
$$3\sqrt{3} \times 3\sqrt{12}$$

$$9\sqrt{36}$$

$$9 \times 6 = 54$$

Find the equation of the perpendicular bisector of (6, 2) and (10, 10).

$m=2$



(8, 6)

$$y = -\frac{1}{2}x + c$$

$$6 = -4 + c \quad c = 10$$

$$y = -\frac{1}{2}x + 10$$