

May 22nd

5-a-day

Numeracy

2	6	7	<input type="checkbox"/>	15
5	6	1	<input type="checkbox"/>	12
9	7	8	<input type="checkbox"/>	24
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

16   19   16

Find the row and column sums for the grid.

Write three quarters as a decimal

$$0.75$$

Write 0.57 as a percentage

$$57\%$$

8cm



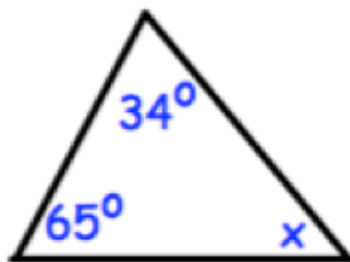
10cm

Find the area

$$80\text{cm}^2$$

Find the perimeter

$$10+10+8+8=36\text{cm}$$



Find x

$$180 - 34 - 65 = 81^\circ$$

Write 0.85 as a fraction in its simplest form

$$\frac{85}{100} = \frac{17}{20}$$

Write 40% as a fraction in its simplest form

$$\frac{2}{5}$$

$$\frac{2}{7} \times \frac{2}{3} = \frac{4}{21}$$

$$\frac{3}{4} \div \frac{4}{5} = \frac{3}{4} \times \frac{5}{4} = \frac{15}{16}$$

Solve  $7(2w + 3) = 70$ 

$$\begin{aligned} 14w + 21 &= 70 \\ 14w &= 49 \\ w &= 3.5 \end{aligned}$$

Solve  $7(w + 11) + w + 9 = 46$ 

$$\begin{aligned} 7w + 77 + w + 9 &= 46 \\ 8w + 86 &= 46 \\ 8w &= -40 \quad w = -5 \end{aligned}$$

Ian  
Hannah

Number of trials	Number of blue beads chosen
25	7
100	19

Write down the relative frequency of Ian choosing a blue bead.

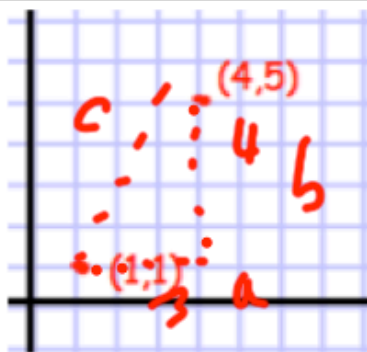
$$\frac{7}{25}$$

Write down the relative frequency of Hannah choosing a blue bead.

$$\frac{19}{100}$$

Whose experiment gives a more reliable estimation of the relative frequency?

Hannah's, as she carried out more trials



Calculate the distance between (1,1) and (4,5). Hint: Pythagoras

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

May 22	5-a-day	Higher						
<p>Write as a fraction</p> <p><math>10^{-3}</math></p> <p><math>\frac{1}{1000}</math></p>	<p>Write down the value of</p> <p><math>10^0</math></p> <p>1</p>							
<p>Simplify fully</p> <p><math>\sqrt{2}(\sqrt{2} - \sqrt{8})</math></p> <p><math>\sqrt{4} - \sqrt{16}</math></p> <p><math>2 - 4 = -2</math></p>								
<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Batch 1</td> <td style="text-align: center;">Batch 2</td> <td style="text-align: center;">Batch 3</td> </tr> <tr> <td style="text-align: center;">150</td> <td style="text-align: center;">100</td> <td style="text-align: center;">250</td> </tr> </table> <p>A manager wants to select stratified sample of 50.</p> <p>How many should she choose from batch 2?</p>	Batch 1	Batch 2	Batch 3	150	100	250		<p><math>\frac{100}{500} \times 50</math></p> <p><math>\frac{1}{5} \times 50 = 10</math></p>
Batch 1	Batch 2	Batch 3						
150	100	250						
<p>Make y the subject</p> <p><math>y + 3 = x(y + 2)</math></p> <p><math>y + 3 = xy + 2x</math></p> <p><math>y - xy = 2x - 3</math></p> <p><math>y(1 - x) = 2x - 3</math></p> <p><math>y = \frac{2x - 3}{1 - x}</math></p>								
<p>The length of a field is 30m to the nearest ten metres.</p> <p style="text-align: center;">LB      25m</p> <p>The width of the field is 10m to the nearest metre.</p> <p style="text-align: center;">LB      9.5m</p>		<p>Work out the minimum area of the field.</p> <p><math>25 \times 9.5</math></p> <p><math>= 237.5 \text{ m}^2</math></p>						