



15th December	
<p>There are red, green and yellow beads in a bag. The relative frequency of a red is 0.18. Mrs Jones chooses a bead at random and then puts it back in.</p>	<p style="text-align: right;"> Corbettmaths</p> <p>If Mrs Jones repeats this 300 times, how many red beads are expected?</p> $300 \times 0.18 = 54$
<p>Work out</p> $5 \div \frac{3}{4}$	$\frac{5}{1} \div \frac{3}{4}$ $\frac{5}{1} \times \frac{4}{3} = \frac{20}{3} = 6\frac{2}{3}$
<p style="text-align: center;"><math>2x + 5</math></p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> <math>x - 2</math>  <math>2x + 5</math> </div> <math>x - 2</math> </div> <p>The perimeter of this rectangle is 84cm</p>	<p>Find x</p> $\begin{array}{r} 6x + 6 = 84 \\ -6 \quad -6 \\ \hline 6x = 78 \\ \div 6 \quad \div 6 \\ \hline x = 13 \end{array}$
 <p style="text-align: center;"><math>12\text{cm}</math></p> $\frac{1}{2}(\pi \times 6^2)$ $\frac{1}{2}(\pi \times 36)$ $18\pi$	<p>Calculate the area of this semi-circle. Leave your answer in terms of <math>\pi</math></p> $18\pi \text{ cm}^2$
<p>James weighed 100kg. His target was to weigh 80kg or less. His weight decreased by 3% each month.</p>	<p>Has he achieved his target after six months? Show your workings.</p> $100 \times 0.97^6 = 83.297\text{kg}$ <p style="text-align: right;">No.</p>