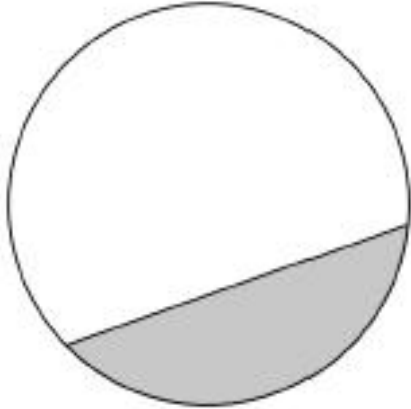


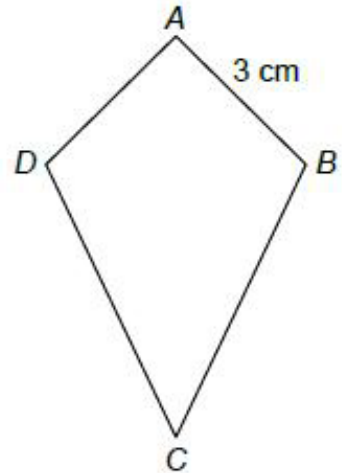
5-a-day Warm-Up

Warm-Up 1B

1.	Simplify $4 \times x \times 2 \times x$	2.	Write 0.37 as a fraction.	5.	Circle the word that describes the shaded part of the circle. 
3.	Write down the probability of rolling a 3 on an ordinary fair dice. Give your answer as a fraction.	4.	Convert 4.2 metres into centimetres.		

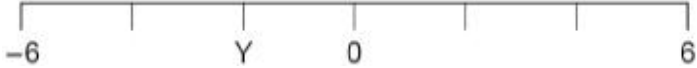
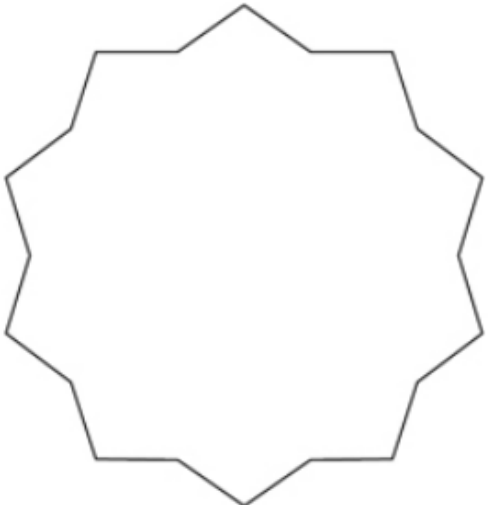
5-a-day Warm-Up

Warm-Up 2B

1.	Write $\frac{3}{8}$ as a decimal.	2.	Here are some numbers. 4 7 7 13 15 16 18 Work out the range.	5.	The perimeter of kite $ABCD$ is 30 cm  The length of side AB is 3 cm Work out the length of side BC .
3.	Factorise $4a + 12$	4.	Convert 470 millimetres into centimetres.		

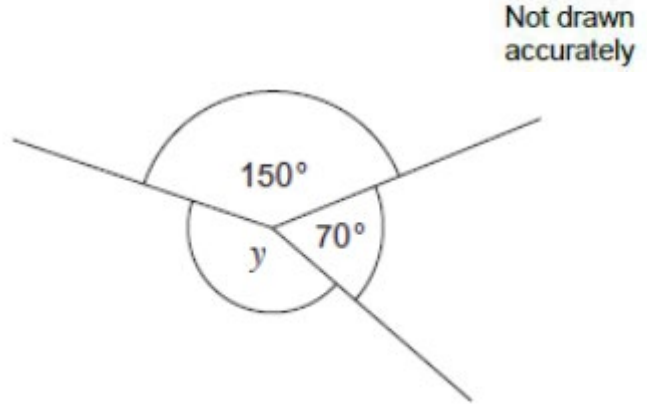
5-a-day Warm-Up

Warm-Up 3B

1.	A bag contains green counters and yellow counters in the ratio 2 : 3 What fraction of the counters are green?	2.	Here is a number line.  What number is at Y?	5.	Write down the order of rotational symmetry of this shape. 
3.	Rearrange $x = y - 4$ to make y the subject.	4.	Here are some numbers. 2 3 6 7 8 9 9 13 Write down the mode.		

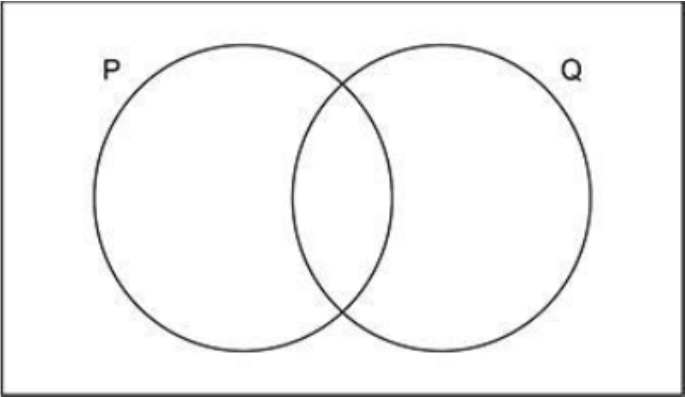
5-a-day Warm-Up

Warm-Up 4B

1.	Write a number in the box to make the calculation correct. $25 \div \boxed{} = 0.25$	2.	The probability of Tails when a biased coin is thrown is 0.7 The coin is thrown 400 times. Work out the expected number of Heads.	5.	Three straight lines meet at a point.  Work out y .
3.	Write $\frac{4}{5}$ as a percentage.	4.	Multiply out $4(3a + 2)$		

5-a-day Warm-Up

Warm-Up 5B

1.	In a pie chart, one sector represents $\frac{1}{3}$ of the data. Work out the angle of that sector? Circle your answer. 3° 30° 60° 120°	2.	Work out the size of an exterior angle of a regular octagon?	5.	On the Venn diagram, shade the section represented by $P \cup Q$ 
3.	How many minutes are there in $2\frac{1}{4}$ hours?	4.	Work out $\frac{4}{9}$ of 45		

5-a-day Warm-Up

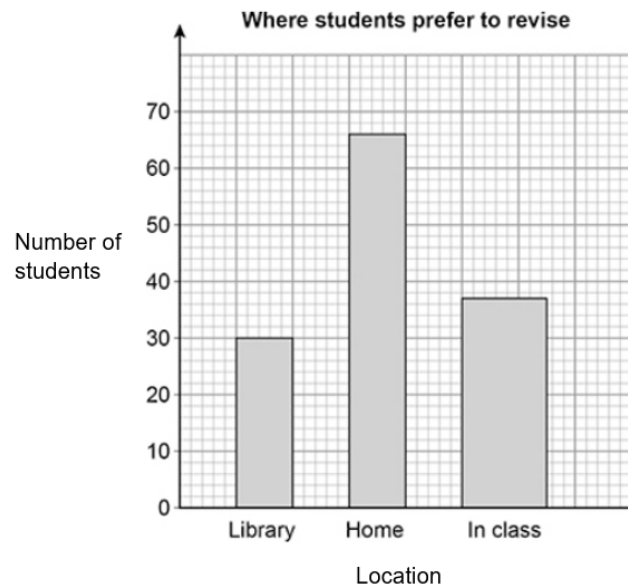


Warm-Up 6B

1.	Work out 20% of 180	2.	Chris and Dani share £280 in the ratio 2 : 5 Work out how much money Dani receives.	5.	Here is some information about the time spent travelling to work by 50 people. <table><tr><th>Time, t minutes</th><th>Number of people</th></tr><tr><td>$0 < t \leq 15$</td><td>2</td></tr><tr><td>$15 < t \leq 30$</td><td>9</td></tr><tr><td>$30 < t \leq 45$</td><td>31</td></tr><tr><td>$45 < t \leq 60$</td><td>8</td></tr></table> Work out the number of people who spent 30 minutes or less .	Time, t minutes	Number of people	$0 < t \leq 15$	2	$15 < t \leq 30$	9	$30 < t \leq 45$	31	$45 < t \leq 60$	8
Time, t minutes	Number of people														
$0 < t \leq 15$	2														
$15 < t \leq 30$	9														
$30 < t \leq 45$	31														
$45 < t \leq 60$	8														
3.	Simplify $9y + 4 - 3y + 7$	4.	In a triangle, two of the angles are 57° and 46° . Work out the size of the third angle.												

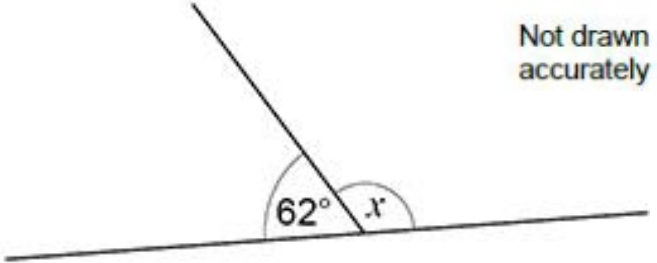
5-a-day Warm-Up

Warm-Up 7B

1.	Work out $12 - 2 \times 4 + 3$	2.	Write 15 as a percentage of 75	5.	A bar chart is drawn to show where students prefer to revise.  Number of students Location <table><tr><th>Location</th><th>Number of students</th></tr><tr><td>Library</td><td>30</td></tr><tr><td>Home</td><td>65</td></tr><tr><td>In class</td><td>37</td></tr></table> Make one criticism of the bar chart.	Location	Number of students	Library	30	Home	65	In class	37
Location	Number of students												
Library	30												
Home	65												
In class	37												
3.	Two sides of a triangle have lengths 14 cm and 23 cm Which of these is a possible length of the other side? Circle your answer. 9 cm 14 cm 23 cm 37 cm	4.	y is 5 less than x . Write an equation for y in terms of x .										

5-a-day Warm-Up

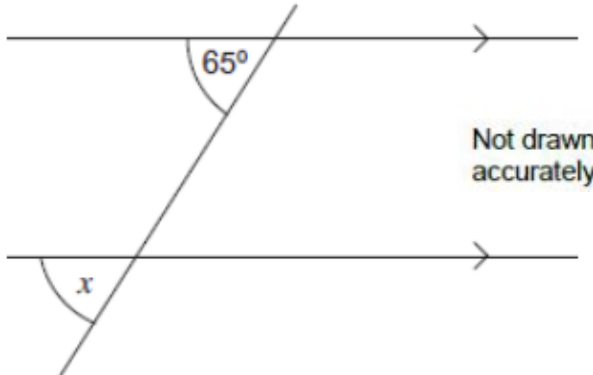
Warm-Up 8B

1.	Write 5 200 000 in standard form.	2.	Seven melons cost £8.75 in total. How much do three of these melons cost?	5.	Here are two straight lines.  Not drawn accurately Work out the size of angle x.
3.	Which one of the following is discrete data? Circle your answer. Mass of a TV Height of a TV mast Time taken to deliver a TV Number of TVs sold	4.	Solve $\frac{a}{3} = 18$		

5-a-day Warm-Up



Warm-Up 9B

1.	Write these numbers in order starting with the smallest. 5.403 5.43 5.4 5.04	2.	Circle the expression that can be written as $2x + y$ $2 + x + y$ $2 \times x + y$ $x \times x + y$ $x + x \times y$	5.	Write down the size of angle x .  Give a reason for your answer.						
3.	An experiment has three outcomes. <table border="1" data-bbox="170 891 800 1052"><tr><td>Outcome</td><td>A</td><td>B</td><td>C</td></tr><tr><td>Probability</td><td>0.2</td><td></td><td>0.5</td></tr></table> Complete the table.	Outcome	A			B	C	Probability	0.2		0.5
Outcome	A	B	C								
Probability	0.2		0.5								

5-a-day Warm-Up

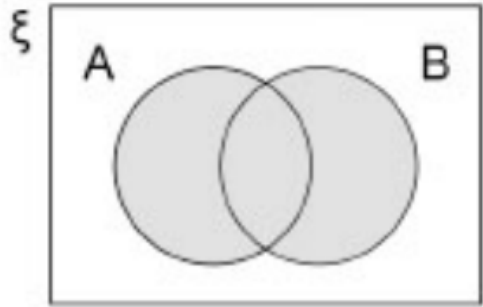


Warm-Up 10B

1.	Write 4.8×10^5 as an ordinary number.	2.	Circle the inequality. $(x - 3)^2$ $(x - 3)^2 \equiv x^2 - 6x + 9$ $(x - 3)^2 > 5$ $(x - 3)^2 = 1 - 6x$	5.	Here is a frequency table for the times taken to complete a task. <table border="1"><thead><tr><th>Times, t (min)</th><th>Frequency</th></tr></thead><tbody><tr><td>$0 < t \leq 1$</td><td>38</td></tr><tr><td>$1 < t \leq 2$</td><td>16</td></tr><tr><td>$2 < t \leq 3$</td><td>17</td></tr><tr><td>$3 < t \leq 4$</td><td>15</td></tr><tr><td>$4 < t \leq 5$</td><td>14</td></tr><tr><td colspan="2">Total = 100</td></tr></tbody></table> Write down the class interval that is the mode.	Times, t (min)	Frequency	$0 < t \leq 1$	38	$1 < t \leq 2$	16	$2 < t \leq 3$	17	$3 < t \leq 4$	15	$4 < t \leq 5$	14	Total = 100	
Times, t (min)	Frequency																		
$0 < t \leq 1$	38																		
$1 < t \leq 2$	16																		
$2 < t \leq 3$	17																		
$3 < t \leq 4$	15																		
$4 < t \leq 5$	14																		
Total = 100																			
3.	Work out $\begin{pmatrix} 5 \\ 2 \end{pmatrix} - \begin{pmatrix} 4 \\ 6 \end{pmatrix}$	4.	Write $12 : 18$ in the form $n : 1$																

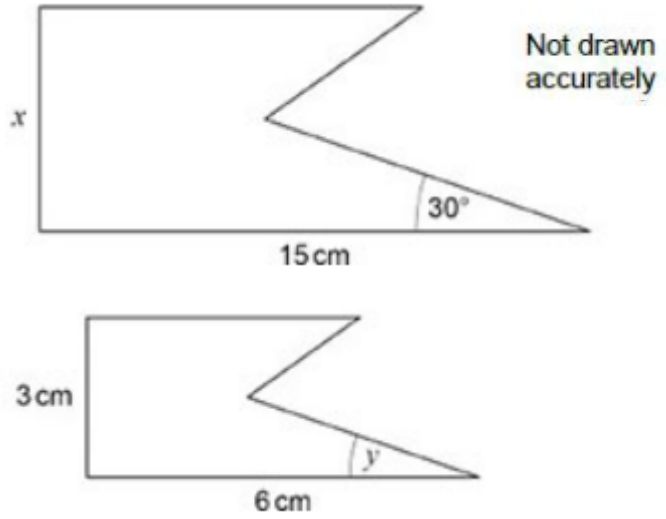
5-a-day Warm-Up

Warm-Up 11B

1.	a is half of b Write the ratio $a : b$	2.	Write $4\frac{2}{7}$ as an improper fraction.	5.	 Which of these represents the shaded region? Circle your answer. A' A ∪ B A ∩ B B
3.	Multiply out and simplify $(a - 3)^2$	4.	Which of these cannot be the number of lines of symmetry of a triangle? Circle your answer. 0 1 2 3		

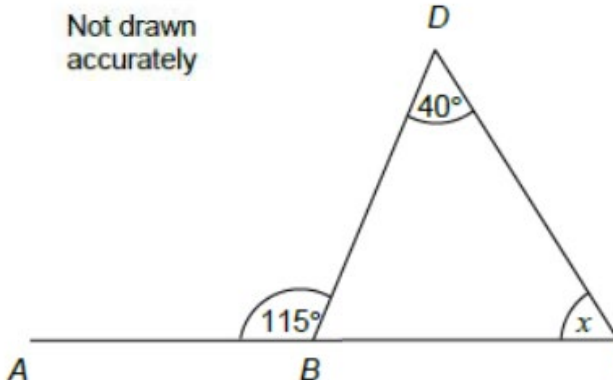
5-a-day Warm-Up

Warm-Up 12B

1.	The temperature was 3°C and decreases by 7°C Work out the new temperature.	2.	Solve $2x + 5 = 17$	5.	These two shapes are similar.  Write down the value of y .
3.	The probability that A is the outcome of an experiment is 70% Write down the probability that A is not the outcome.	4.	A tennis player wins or loses matches in the ratio win : lose = 4 : 3 What fraction of the matches do they lose?		

5-a-day Warm-Up

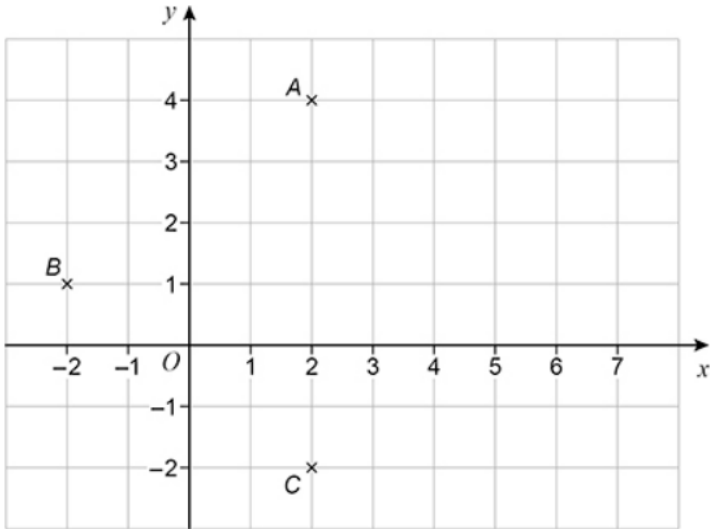
Warm-Up 13B

1.	Write down a 3-digit square number between 200 and 300	2.	A spinner has ten sections, each labelled A, B or C. <table><tr><td></td><td>A</td><td>B</td><td>C</td></tr><tr><td>Probability</td><td>0.2</td><td>0.5</td><td>0.2</td></tr></table> Give one reason why there must be a mistake in the table.		A	B	C	Probability	0.2	0.5	0.2	5.	ABC is a straight line. Not drawn accurately  Work out the size of angle x .
	A	B	C										
Probability	0.2	0.5	0.2										
3.	Factorise $10x + 35$	4.	What name is given to the middle value in a set of data? Circle your answer. mean median mode range										

5-a-day Warm-Up



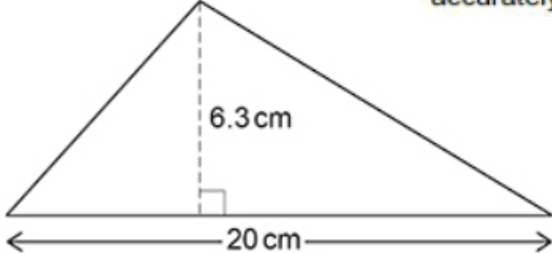
Warm-Up 14B

1.	Write a number in the box to make the calculation correct. $17.4 + 13.8 + \square = 39$	2.	An ordinary fair dice is thrown. Work out the probability of getting a number less than 5.	5.	Points A , B and C are plotted on a grid. 
3.	Simplify $5x + 3 - 7 - 3x$	4.	Circle the shortest length. 12 000 cm 0.013 km 125 m 14 000 mm		

Plot point D on the grid so that $ABCD$ is a rhombus.

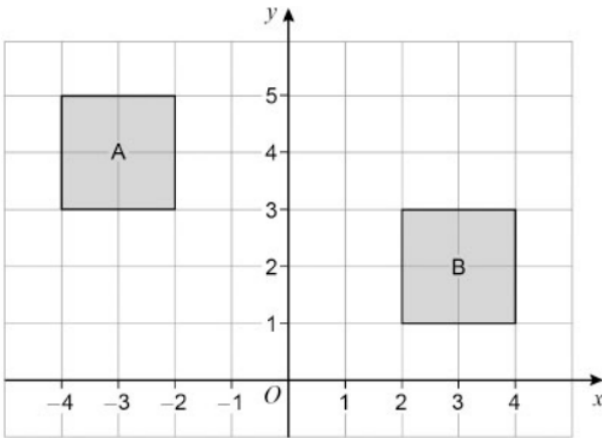
5-a-day Warm-Up

Warm-Up 15B

1.	Write down two numbers that are multiples of 3 and multiply to make 324	2.	Simplify $y^3 \times y^2$	5.	Here is a triangle. Not drawn accurately  Work out the area of the triangle.
3.	Calculate $\sqrt[3]{12\,167}$	4.	Circle the decimal that has the same value as $\frac{4}{5}$ 0.08 0.45 0.8 4.5		

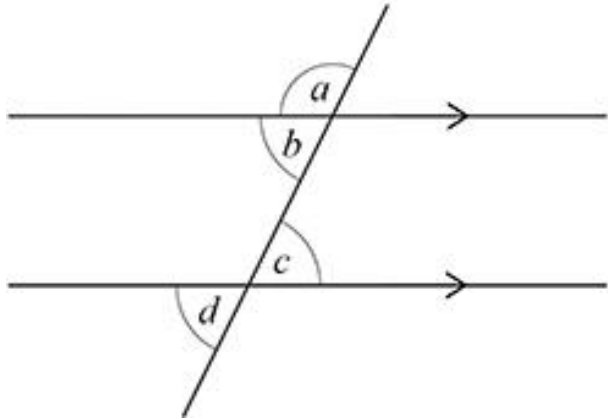
5-a-day Warm-Up

Warm-Up 16B

1.	Calculate $3^4 \times 4^2$	2.	Round 53.2487 to 2 decimal places.	5.	 Work out the vector that translates shape A to shape B. $\left(\quad \right)$
3.	Work out the value of $4x^2 - 1$ when $x = -5$	4.	A coin is thrown 60 times. The coin lands on tails 45 times. Write down the relative frequency of landing on tails.		

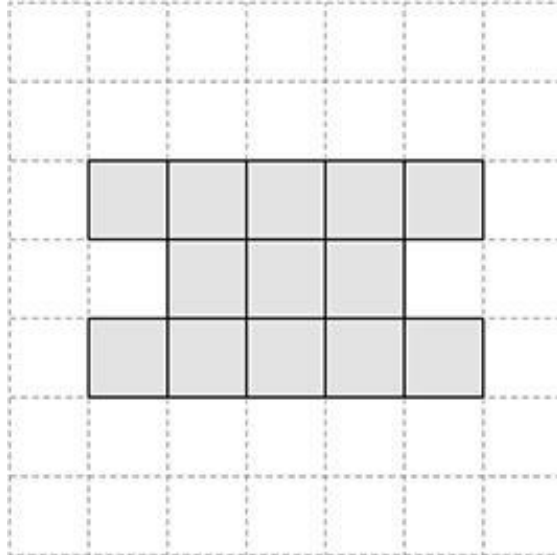
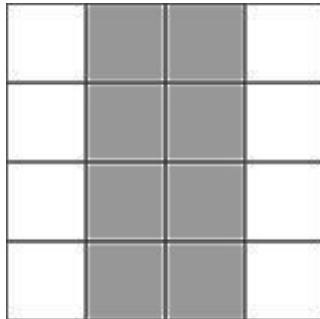
5-a-day Warm-Up

Warm-Up 17B

1.	Write a fraction in the box to make the calculation correct. $\frac{1}{2} \times \boxed{} = \frac{1}{10}$	2.	Write 0.24 as a fraction of 0.6	5.	 Circle the pair of corresponding angles. <i>a</i> and <i>b</i> <i>b</i> and <i>c</i> <i>b</i> and <i>d</i> <i>c</i> and <i>d</i>
3.	Rearrange $c = \frac{d}{7}$ to make <i>d</i> the subject.	4.	An ordinary fair dice is rolled ten times. Here are the first nine results. 6 1 3 2 1 5 5 5 6 Write down the probability of getting a 4 on the tenth roll.		

5-a-day Warm-Up

Warm-Up 18B

1.	y is a whole number. Circle the words that describe $4y$ always odd always even could be odd or even	2.	Simplify $\frac{12w+9}{3}$	5.	Here is a pattern of squares on a grid.  Draw the two lines of symmetry on the pattern.
3.	Shade some more squares on the grid so that 75% of the grid is shaded. 	4.	$x = 28\,000$ to the nearest 1000 Work out the smallest possible value of x.		