

FOCUS 4 TASKS - Set 5

Each of the 30 topics is covered once within the 5 sheets

Sheet 5A

Averages from a Table	Q1
Expanding Double Brackets	Q2
Plans and Elevations	Q3
Alternate and Corresponding Angles	Q4
Rotations	Q5
Straight Line Graphs	Q6

Sheet 5B

Product of Prime Factors	Q1
Volume	Q2
Linear equations	Q3
Trigonometry	Q4
Compound Measures	Q5
Probability from a Table	Q6

Sheet 5C

Proportion	Q1
Pythagoras	Q2
Index Laws	Q3
Averages from Grouped Data	Q4
Exchange Rates	Q5
Enlargements	Q6

Sheet 5D

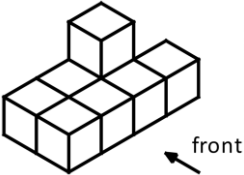
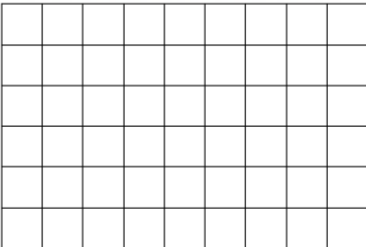
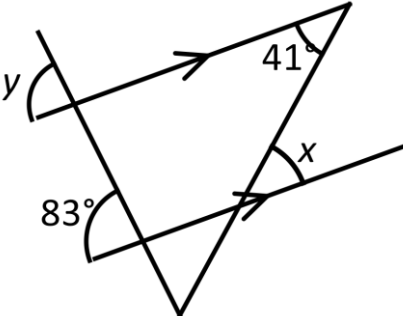
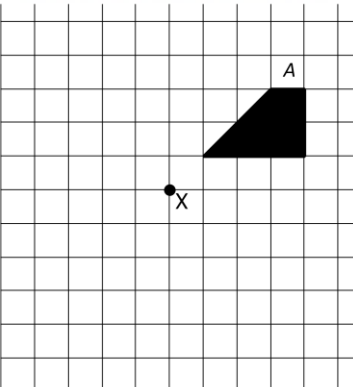
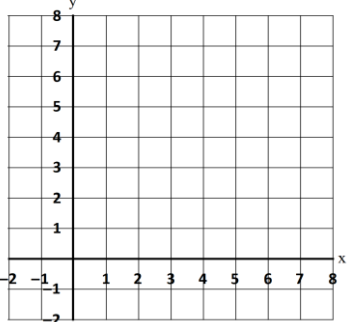
Translations	Q1
Sequences - nth term	Q2
Standard Form	Q3
Use of Calculator (inc percentages)	Q4
Inequalities	Q5
Scatter Graphs	Q6

Sheet 5E

Two Way Tables	Q1
Circles	Q2
Reflections	Q3
Expand and Simplify	Q4
Estimation	Q5
Equivalence	Q6

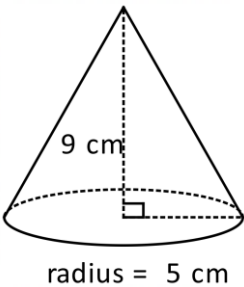
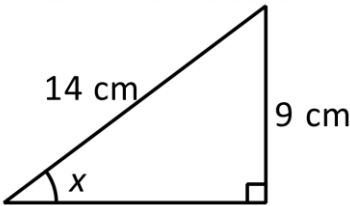
SKILLS CHECK

1) $25.6 + 19.88 =$	2) $142 - 128.5$	3) 65×1.7
4) $60 \div 150$	5) $\frac{5}{6} \times \frac{3}{10}$	6) 7×0.05
7) 5% of £64	8) On a map 50 km is represented by 10 cm. Find the scale of the map	9) A prize is divided in the ratio 7:5. One share is £70 more than the other what is the total amount?

QUESTION 1	QUESTION 2	QUESTION 3																		
<p>Calculate the mean</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>x</td><td>f</td><td></td></tr> <tr><td>3</td><td>8</td><td></td></tr> <tr><td>4</td><td>12</td><td></td></tr> <tr><td>5</td><td>15</td><td></td></tr> <tr><td>6</td><td>9</td><td></td></tr> <tr><td>7</td><td>6</td><td></td></tr> </table> <p>What is the modal value?</p>	x	f		3	8		4	12		5	15		6	9		7	6		<p>Expand and simplify</p> $(x + 9)(x + 4)$	<p>Draw the plan and front elevation</p>  
x	f																			
3	8																			
4	12																			
5	15																			
6	9																			
7	6																			
QUESTION 4	QUESTION 5	QUESTION 6																		
<p>Calculate x and y</p> 	<p>Rotate shape A through 90° anti-clockwise about point X. Label your shape B</p> 	<p>Complete the table of values for $x + y = 7$</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>x</td><td>2</td><td>4</td><td>7</td></tr> <tr><td>y</td><td></td><td></td><td></td></tr> </table> 	x	2	4	7	y													
x	2	4	7																	
y																				

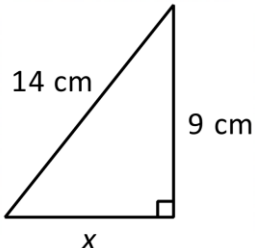
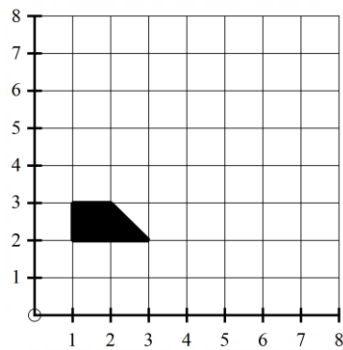
SKILLS CHECK

1) $225.6 + 198.8 =$	2) $82.5 - 12.85$	3) 1.5×43
4) $200 \div 2500$	5) $\frac{5}{6} \div \frac{2}{3}$	6) 0.6×0.05
7) 2% of £128	8) On a map 2 km is represented by 10 cm. Find the scale of the map	9) A prize is divided in the ratio 4:9. One share is £95 more than the other what is the total amount?

QUESTION 1	QUESTION 2	QUESTION 3										
Express 588 as a product of prime factors	Use the formula Volume = $\frac{1}{3}\pi r^2 h$ to calculate the volume of the cone 	Solve $\frac{x}{3} - 4 = 3$										
QUESTION 4	QUESTION 5	QUESTION 6										
Calculate the size of angle x correct to the nearest degree 	A coach covers a distance of 92 miles in 1 hour 20 minutes. It then stops for 10 minutes before covering another 58 miles in an hour. Calculate the average speed of the coach for the whole journey.	The table shows the probability of scoring different numbers on a spinner <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Number</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>Probability</td> <td>0.4</td> <td>0.25</td> <td>0.3</td> <td></td> </tr> </table> Calculate the probability of scoring a 4 Calculate the probability scoring an odd number	Number	1	2	3	4	Probability	0.4	0.25	0.3	
Number	1	2	3	4								
Probability	0.4	0.25	0.3									

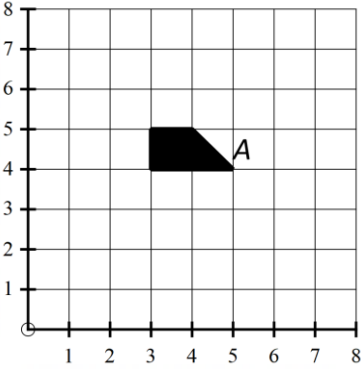
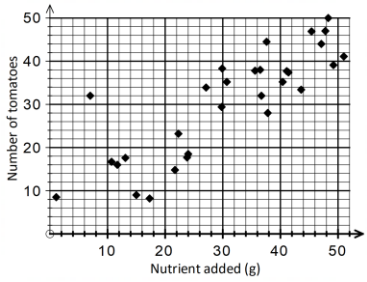
SKILLS CHECK

1) $35.64 + 29.8 =$	2) $105 - 87.2$	3) 55×2.5
4) $4 \div 160$	5) $\frac{2}{9} \times \frac{3}{8}$	6) 0.5×0.02
7) 1.5% of £82	8) On a map 40 km is represented by 10 cm. Find the scale of the map	9) A prize is divided in the ratio 1:3. One share is £30 more than the other what is the total amount?

QUESTION 1	QUESTION 2	QUESTION 3																								
<p>A recipe for 9 cupcakes uses 315g of flour. If Alex has 385g of flour, how many cupcakes can he make?</p>	<p>Calculate x correct to 1 decimal place</p> 	<p>Simplify</p> $2 \times a^2 \times 4 \times a$																								
QUESTION 4	QUESTION 5	QUESTION 6																								
<p>Calculate an estimate of the mean time</p> <table border="1" data-bbox="95 1668 534 1926"> <thead> <tr> <th>Time (s)</th> <th>f</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>$0 \leq t < 20$</td> <td>36</td> <td></td> <td></td> </tr> <tr> <td>$20 \leq t < 40$</td> <td>23</td> <td></td> <td></td> </tr> <tr> <td>$40 \leq t < 60$</td> <td>19</td> <td></td> <td></td> </tr> <tr> <td>$60 \leq t < 80$</td> <td>12</td> <td></td> <td></td> </tr> <tr> <td>$80 \leq t < 100$</td> <td>10</td> <td></td> <td></td> </tr> </tbody> </table>	Time (s)	f			$0 \leq t < 20$	36			$20 \leq t < 40$	23			$40 \leq t < 60$	19			$60 \leq t < 80$	12			$80 \leq t < 100$	10			<p>If the exchange rate is $\text{€}1 = \\$1.20$ Work out the missing values</p> <p>a) $\\$234 = \text{€}.....$</p> <p>b) $\text{€}84.50 = \\$.....$</p>	<p>Enlarge shape A using centre (0,0) and scale factor 2. Label your shape B</p> 
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$0 \leq t < 20$	36																									
$20 \leq t < 40$	23																									
$40 \leq t < 60$	19																									
$60 \leq t < 80$	12																									
$80 \leq t < 100$	10																									

SKILLS CHECK

1) $602.5 + 109.88 =$	2) $165 - 106.5$	3) 2.9×26
4) $90 \div 360$	5) $\frac{1}{5} \div \frac{3}{10}$	6) 0.4×0.05
7) 2.5% of £44	8) On a map 2 km is represented by 10 cm. Find the scale of the map	9) A prize is divided in the ratio 3:8. One share is £135 more than the other what is the total amount?

QUESTION 1	QUESTION 2	QUESTION 3
<p>Translate shape A by vector $\begin{pmatrix} 2 \\ -3 \end{pmatrix}$ Label your shape B</p> 	<p>Find the nth term of 13, 16, 19, 22, 25</p> <p>How many terms in the sequence are less than 120?</p>	<p>Express in standard form</p> <p>0.00016</p> <p>2600000</p>
QUESTION 4	QUESTION 5	QUESTION 6
<p>Give your answers correct to 1 decimal place</p> <p>Work out</p> <p>$15 \times \sin 50^\circ$</p> <p><u>43.5</u></p> <p>$17.2 - 11.2$</p>	<p>Find the smallest integer value of x that satisfies the inequality</p> $4x - 2 > x + 11$	<p>Tomato plants are given different quantities of a nutrient and the number of tomatoes recorded</p>  <p>Circle the point representing the result recorded incorrectly.</p> <p>Use a line of best fit to estimate the number of tomatoes if 26g of the nutrient is used</p>

