

FOCUS 4 TASKS - Set 2

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

Sheet 2A

Exchange Rates	Q1
Averages from a Table	Q2
Expanding Double Brackets	Q3
Enlargements	Q4
Standard Form	Q5
Alternate and Corresponding Angles	Q6

Sheet 2B

Two Way Tables	Q1
Index Laws	Q2
Averages from Grouped Data	Q3
Compound Measures	Q4
Rotations	Q5
Plans and Elevations	Q6

Sheet 2C

Scatter Graphs	Q1
Inequalities	Q2
Pythagoras	Q3
Translations	Q4
Reflections	Q5
Linear equations	Q6

Sheet 2D

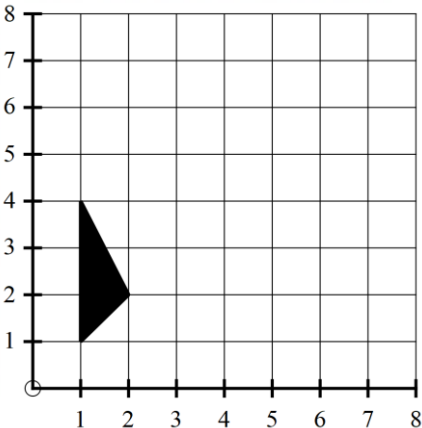
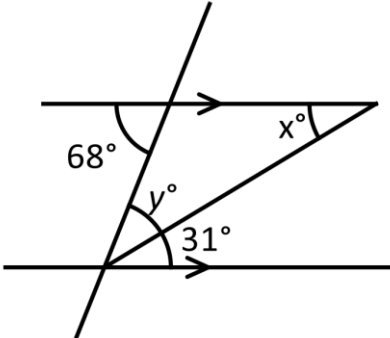
Probability from a Table	Q1
Use of Calculator (inc percentages)	Q2
Expand and Simplify	Q3
Circles	Q4
Trigonometry	Q5
Product of Prime Factors	Q6

Sheet 2E

Volume	Q1
Equivalence	Q2
Straight Line Graphs	Q3
Proportion	Q4
Sequences - nth term	Q5
Estimation	Q6

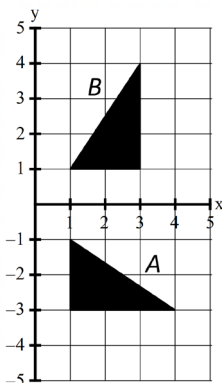
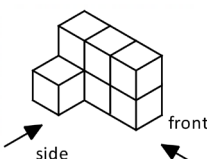
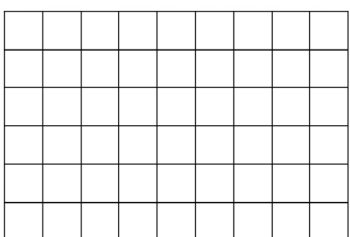
SKILLS CHECK

1) $558 + 198 =$	2) $302 - 59$	3) 62×37
4) $96 \div 8$	5) $\frac{2}{3} \div \frac{1}{4}$	6) What is the value of the underlined figure $3.\underline{5}4$?
7) 8% of £48	8) A distance of 2.1 m is shown on a plan with scale 1:10 .Find the length on the plan	9) A prize is divided in the ratio 3:4. If the largest share is £48, what is the other amount?

QUESTION 1	QUESTION 2	QUESTION 3												
<p>If the exchange rate is £1 = \$1.80 Work out the missing values</p> <p>a) £520 = \$.....</p> <p>b) \$135.90 = £</p>	<p>Calculate the mean</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>x</th> <th>f</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>5</td> </tr> <tr> <td>16</td> <td>9</td> </tr> <tr> <td>17</td> <td>21</td> </tr> <tr> <td>18</td> <td>3</td> </tr> <tr> <td>19</td> <td>2</td> </tr> </tbody> </table> <p>What is the median value?</p>	x	f	15	5	16	9	17	21	18	3	19	2	<p>Expand and simplify $(x - 4)(x + 9)$</p>
x	f													
15	5													
16	9													
17	21													
18	3													
19	2													
QUESTION 4	QUESTION 5	QUESTION 6												
<p>Enlarge the triangle with centre (0,0) and scale factor 2</p> 	<p>Express in standard form</p> <p>0.00026</p> <p>2100</p>	<p>Calculate angles x and y</p> 												

SKILLS CHECK

1) $758 + 237 =$	2) $803 - 127$	3) 2.5×42
4) $108 \div 12$	5) $\frac{4}{5} \div \frac{2}{3}$	6) What is the value of the underlined figure $10.\underline{0}5$
7) 6% of £80	8) A distance of 50 m is shown on a plan with scale 1:1000 .Find the length on the plan	9) A prize is divided in the ratio 4:7. If the largest share is £84, what is the other amount?

QUESTION 1	QUESTION 2	QUESTION 3																																												
<p>62 of the students are male. Out of the 43 students who pick Chips 19 of them are female. All of the 29 students who pick burgers are male. Complete the table</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>Chips</th> <th>Pizza</th> <th>Burger</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>Female</th> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <th>Male</th> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <th>Total</th> <td></td> <td></td> <td></td> <td>100</td> </tr> </tbody> </table>		Chips	Pizza	Burger	Total	Female					Male					Total				100	<p>Simplify</p> $\frac{3x^2y \times 4xy}{6xy^2}$ <p>Write 5^{-2} as a fraction</p>	<p>Calculate an estimate of the mean time.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Time</th> <th>f</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>$10 \leq t < 20$</td> <td>7</td> <td></td> <td></td> </tr> <tr> <td>$20 \leq t < 30$</td> <td>12</td> <td></td> <td></td> </tr> <tr> <td>$30 \leq t < 40$</td> <td>14</td> <td></td> <td></td> </tr> <tr> <td>$40 \leq t < 50$</td> <td>11</td> <td></td> <td></td> </tr> <tr> <td>$50 \leq t < 60$</td> <td>6</td> <td></td> <td></td> </tr> </tbody> </table>	Time	f			$10 \leq t < 20$	7			$20 \leq t < 30$	12			$30 \leq t < 40$	14			$40 \leq t < 50$	11			$50 \leq t < 60$	6		
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QUESTION 4	QUESTION 5	QUESTION 6																																												
<p>A cyclist covers a distance of 6 km in 20 minutes. She rests for 10 minutes before cycling another 9 km in 45 minutes. Calculate her average speed for the whole journey.</p>	<p>Describe fully the single transformation that maps triangle A onto triangle B</p> 	<p>Draw the front and side elevations</p>  																																												

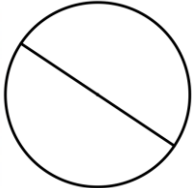
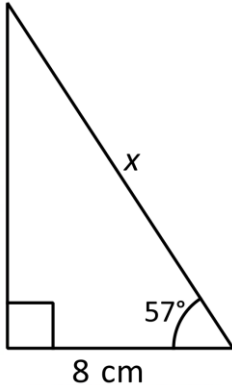
SKILLS CHECK

1) $458 + 336 =$	2) $911 - 264$	3) 1.5×82
4) $63 \div 9$	5) $\frac{1}{8} \div \frac{3}{4}$	6) What is the value of the underlined figure 12.7 <u>6</u> 4?
7) 4% of £65	8) A distance of 40 m is shown on a plan with scale 1:1000 .Find the length on the plan	9) A prize is divided in the ratio 2 : 5. If the smallest share is £48, what is the other amount?

QUESTION 1	QUESTION 2	QUESTION 3
<p>The graphs show the outside temperature and units of electricity used for heating</p> <p>Circle the outlier Estimate the temperature if 40 units of electricity was used.</p>	<p>Solve</p> $3x - 2 < x + 8$ <p>Show your solution on the number line</p>	<p>Calculate x correct to 1 decimal place</p>
QUESTION 4	QUESTION 5	QUESTION 6
<p>Translate shape A by vector $\begin{pmatrix} -2 \\ 4 \end{pmatrix}$. Label your new shape B</p>	<p>Describe fully the single transformation that maps triangle A onto triangle B</p>	<p>Solve</p> $\frac{x + 3}{2} = 4$

SKILLS CHECK

1) $752 + 337 =$	2) $852 - 269$	3) 84×35
4) $132 \div 11$	5) $\frac{4}{5} \div \frac{7}{10}$	6) What is the value of the underlined figure $0.006\underline{5}$
7) 2.5% of £30	8) A distance of 5 m is shown on a plan with scale 1:10000 .Find the length on the plan	9) A prize is divided in the ratio 7:3. If the largest share is £112, what is the other amount?

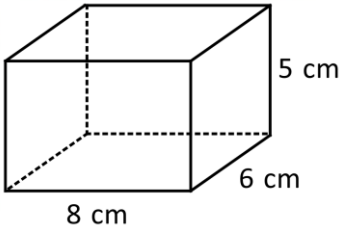
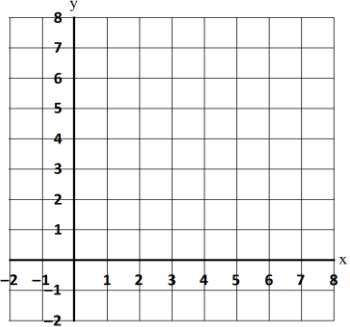
QUESTION 1	QUESTION 2	QUESTION 3										
<p>The table shows the probability of picking different coloured counters</p> <table border="1"> <tr> <td>Card</td> <td>red</td> <td>grey</td> <td>pink</td> <td>blue</td> </tr> <tr> <td>Probability</td> <td>0.14</td> <td>0.62</td> <td></td> <td>0.2</td> </tr> </table> <p>Calculate the probability of picking a pink counter</p> <p>Calculate the probability of picking a blue or grey counter</p>	Card	red	grey	pink	blue	Probability	0.14	0.62		0.2	<p>Give your answers correct to 1 decimal place</p> <p>Work out</p> $2.5^4 - \frac{1}{5}$ $(3.24 - 1.58)^3$	<p>Expand and simplify</p> $3(2x + 2) - 2(x - 5)$
Card	red	grey	pink	blue								
Probability	0.14	0.62		0.2								
QUESTION 4	QUESTION 5	QUESTION 6										
<p>Calculate the circumference of the circle. Give your answer correct to 1 decimal place</p>  <p>diameter = 8 cm</p>	<p>Calculate x correct to 1 decimal place</p> 	<p>Express 96 as the product of prime factors</p>										

FOCUS 4 TASK 2E

NAME

SKILLS CHECK

1) $609 + 248 =$	2) $964 - 359$	3) 2.8×4.5
4) $72 \div 8$	5) $\frac{9}{10} \div \frac{3}{5}$	6) What is the value of the underlined figure <u>2</u> 0.02
7) 1.5% of £240	8) A distance of 0.8 km is shown on a plan with scale 1:10000 .Find the length on the plan	9) A prize is divided in the ratio 5:2. If the smallest share is £42, what is the other amount?

QUESTION 1	QUESTION 2	QUESTION 3										
<p>Calculate the volume</p> 	<p>Express $\frac{25}{200}$ as a percentage</p> <p>Express 0.65 as a fraction in its lowest form</p>	<p>Complete the table of values and plot the graph of $y = 7 - x$</p> <table border="1" data-bbox="1136 1077 1422 1151"> <tr> <td>x</td> <td>-1</td> <td>0</td> <td>3</td> <td>7</td> </tr> <tr> <td>y</td> <td></td> <td>7</td> <td></td> <td></td> </tr> </table> 	x	-1	0	3	7	y		7		
x	-1	0	3	7								
y		7										
QUESTION 4	QUESTION 5	QUESTION 6										
<p>A recipe for 6 pies uses 285g of flour. If Molly has 475g of flour, how many pies can she make?</p>	<p>Find the nth term of 5, 8, 11, 14, ...</p> <p>How many terms in the sequence are less than 100?</p>	<p>Estimate $\sqrt{45.69 + 1.76 \times 7.45}$</p>										