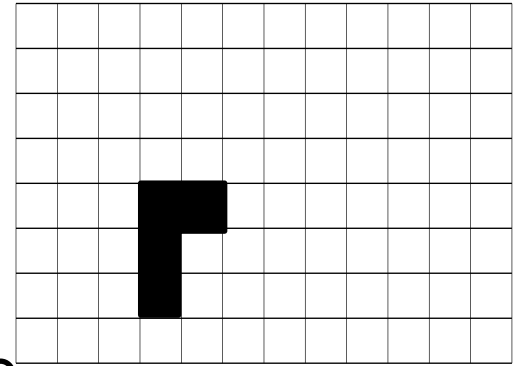


Grade D Practice sheet 1 – do your calculations in your exercise book

Number		6 Complete the table for: $y = 3x + 2$	Enlarge by a scale factor of 2, using O as the centre of enlargement							
1.1 Find the 12 th square number										
1.2 Find the 3 rd cube number										
Calculating										
2 Share £40 into the ratio 1:7										
3.1 Find: $\frac{1}{4}$ of £60		<table border="1"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>	x	0	1	2	y			
x	0	1	2							
y										
3.2 Evaluate: $\frac{1}{4} + \frac{2}{3}$		Plot the graph								
3.3 Evaluate: $\frac{2}{5} - \frac{1}{10}$										
3.4 Find: $7 \div \frac{1}{2}$										
Algebra:		8 What quadrilateral has just one pair of parallel sides Answer.....	Samantha rolls two dice and adds the scores together. Complete the table below to show all possible outcomes							
4.1 Solve: $5x - 2 = 23$		9.								
4.1 Solve $\frac{x}{5} = 11$										
5.2 Find the first three terms of the sequence given by $5n-2$										
5.3 Which term is 102 in the sequence: $5n + 2$										
		Which angles equal 132°								
		What size is angle B								
			In summer, the probability it rains is 0.2. What is the probability that it does NOT rain?							

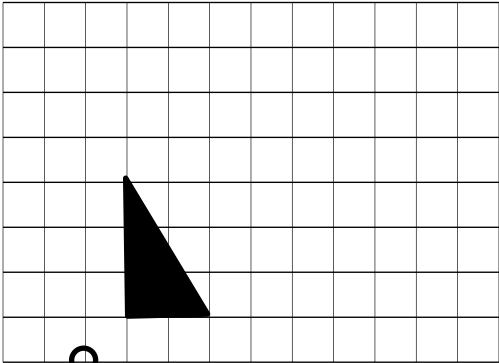
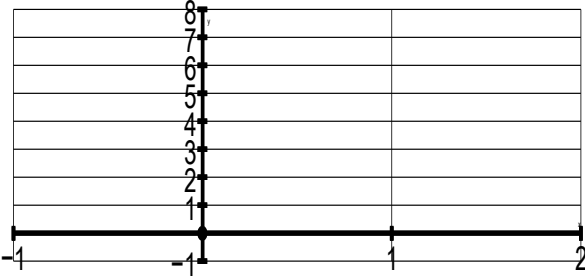
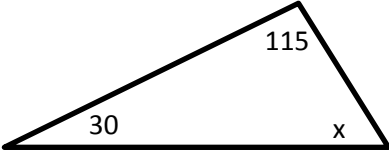


	1	2	3	4	5	6
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2						
3						
4						
5						
6						

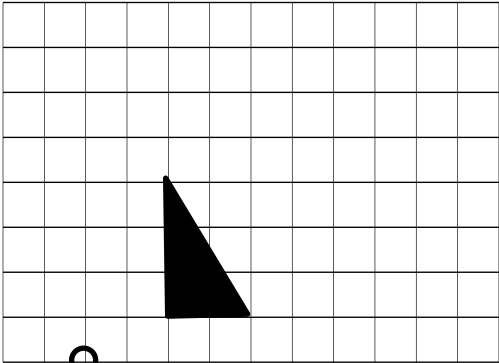
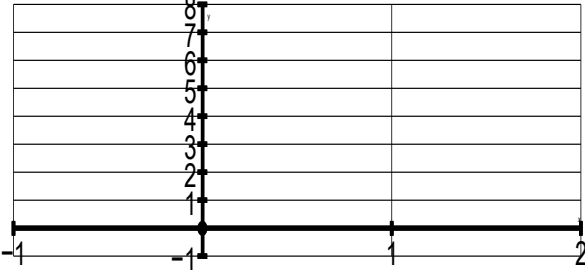
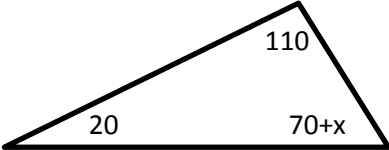
Grade D Practice sheet 2 – do your calculations in your exercise book

Number		6 Complete the table for: $y = 4x - 1$	Enlarge by a scale factor of 2, using O as the centre of enlargement																					
1.1 Find the 13 th square number																								
1.2 Write down 5 th cube number		<table border="1"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>		x	0	1	2	y																
x	0	1		2																				
y																								
Calculating		Plot the graph																						
2 Share £90 into the ratio 1:5																								
3.1 Find: $\frac{2}{3}$ of £90																								
3.2 Evaluate: $\frac{3}{5} - \frac{1}{3}$			Jack tosses a coin and rolls a dice. Complete this table to show all possible outcomes																					
3.3 Evaluate: $\frac{3}{20} + \frac{1}{2}$			<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>T</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>								H							T						
H																								
T																								
3.4 Find: $4 \div \frac{1}{3}$																								
Algebra:		8 What quadrilateral has exactly one pair of parallel sides Answer.....																						
4.1 Solve: $3x + 21 = 42$		9.																						
4.1 Solve $\frac{x}{7} = 2$																								
5.2 Find the first three terms of the sequence given by $3n+1$		Which angle is alternate to angle A																						
5.3 Is the number 52 in the sequence given by $5n + 3$		Which angle is corresponding to angle A																						
			A spinner has three colours. Find the missing probability: <table border="1"> <tr> <td>Colour</td> <td>red</td> <td>green</td> <td>Blue</td> </tr> <tr> <td>Prob.</td> <td>0.3</td> <td>0.5</td> <td>?</td> </tr> </table>	Colour	red	green	Blue	Prob.	0.3	0.5	?													
Colour	red	green	Blue																					
Prob.	0.3	0.5	?																					

Grade D Core Skills Practice Sheet 3

<p>Number</p>		<p>6 Complete the table for:</p>	<p>Enlarge by a scale factor of 2, using O as the centre of enlargement</p>								
<p>1.1 What is the first square number above 130</p>		<p style="text-align: center;">$y = -2x + 6$</p>									
<p>1.2 Write down $\sqrt{169}$</p>		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px 10px;">x</td> <td style="padding: 2px 10px;">0</td> <td style="padding: 2px 10px;">1</td> <td style="padding: 2px 10px;">2</td> </tr> <tr> <td style="padding: 2px 10px;">y</td> <td></td> <td></td> <td></td> </tr> </table>	x	0	1	2	y				
x	0	1	2								
y											
<p>Calculating</p>											
<p>2 Share £25 into the ratio 2:3</p>		<p>Plot the graph</p>									
<p>3.1 Find: $\frac{3}{10}$ of £6</p>											
<p>3.2 Evaluate: $\frac{1}{5} + \frac{3}{4}$</p>											
<p>3.3 Evaluate: $\frac{1}{5} - \frac{3}{10}$</p>											
<p>3.4 Find: $8 \times \frac{3}{4}$</p>											
<p>Algebra:</p>		<p>8 What do angles in a parallelogram add up to?</p>	<p>Tim has a spinner with three colours on it. Red, Green and Brown.</p>								
<p>4.1 Solve: $10 - 3x = 4$</p>			$p(\text{red}) = \frac{3}{10}$								
<p>4.1 Solve $\frac{x}{3} + 1 = 3$</p>		<p>9. Find x</p>	$p(\text{green}) = \frac{2}{5}$								
<p>5.2 Find the first three terms of the sequence given by the formula $10-2n$</p>			<p>What is the probability of getting a brown?</p> <p>A 3-D shape looks like a circle from any perspective. What shape must it be?</p>								

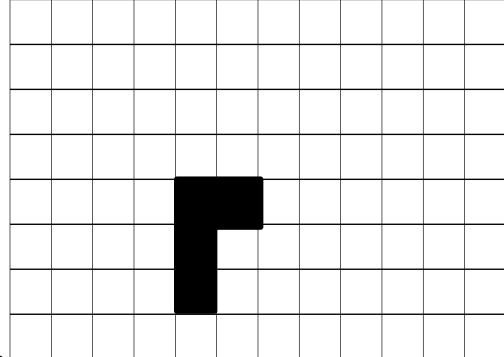
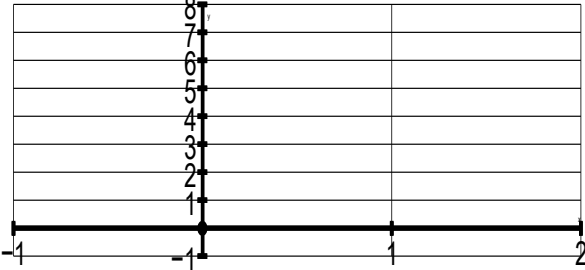
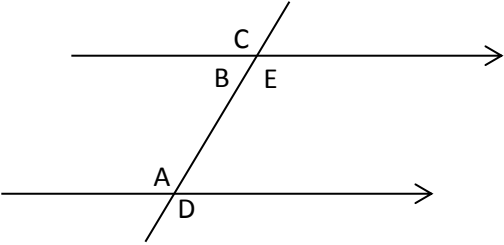
Grade D Core Skills Practice Sheet 4

<p>Number</p>		<p>6 Complete the table for:</p>	<p>Enlarge by a scale factor of 2, using O as the centre of enlargement</p>								
<p>1. What are the closest integers that $\sqrt{105}$ lies between</p>		<p style="text-align: center;">$y = 5 - x$</p>									
<p>Calculating</p>		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>	x	0	1	2	y				
x	0	1	2								
y											
<p>2 Share £140 into the ratio 3:4</p>											
<p>3.1 Find: $\frac{4}{25}$ of £300</p>		<p>Plot the graph</p> 									
<p>3.2 Evaluate: $\frac{2}{7} + \frac{3}{4}$</p>											
<p>3.3 Evaluate: $\frac{1}{3} - \frac{3}{4}$</p>											
<p>3.4 Find: $120 \times \frac{5}{6}$</p>											
<p>Algebra:</p>		<p>8. What is the rotational symmetry of a pentagon?</p>	<p>Peter has a spinner with two colours, red and blue. The probability of getting a red and blue are in the ratio 2:3. Complete the following:</p> <p style="text-align: center;">$P(\text{red}) =$</p> <p style="text-align: center;">$P(\text{blue}) =$</p>								
<p>4.1 Solve: $2 + 3x = -4$</p>		<p>9. Find x</p>									
<p>4.1 Solve $\frac{3x}{2} = 15$</p>											
<p>5.2 Find the 5th term of the sequence given by the formula $15 + 3n$</p>			<p>Suggest two numbers to make the following correct:</p> <p style="text-align: center;">$-17 - \square = -2$</p>								

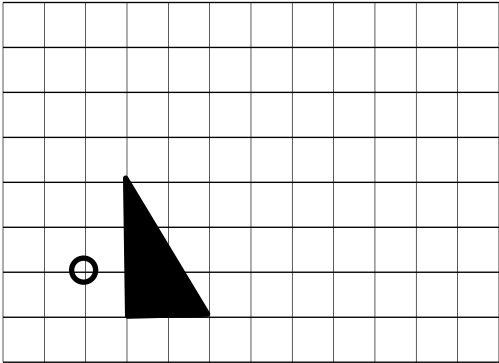
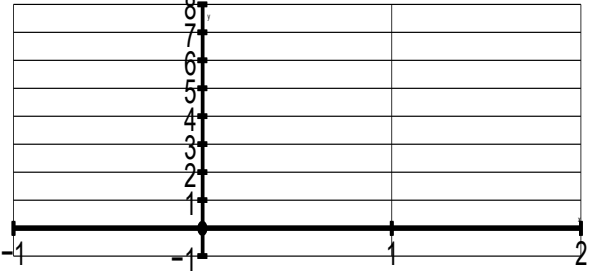
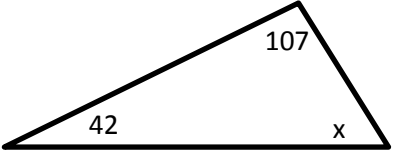
Grade D Practice sheet 5 – do your calculations in your exercise book

Number		6 Complete the table for: $y = 2x + 3$	Enlarge by a scale factor of 2, using O as the centre of enlargement																																																		
1.1 Find the 16 th square number		<table border="1"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>		x	0	1	2	y																																													
x	0	1		2																																																	
y																																																					
1.2 Find the 5 th cube number																																																					
Calculating																																																					
2 Share £32 into the ratio 3:5		Plot the graph																																																			
3.1 Find: $\frac{3}{4}$ of £60																																																					
3.2 Evaluate: $\frac{1}{5} + \frac{3}{4}$																																																					
3.3 Evaluate: $\frac{3}{12} - \frac{1}{6}$																																																					
3.4 Find: $6 \div \frac{1}{3}$		8 How many lines of symmetry does a parallelogram have	Samantha rolls two dice and finds the difference in the scores. Complete the table below to show all possible outcomes																																																		
Algebra:		9.		<table border="1"> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		1	2	3	4	5	6	1							2							3							4							5							6						
	1	2		3	4	5	6																																														
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2																																																					
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6																																																					
4.1 Solve: $4 + 9x = 49$			Find the probability that Samantha's difference is a prime number																																																		
4.1 Solve $\frac{x}{11} = 3$		Find the size of angle B																																																			
5.2 Find the first three terms of the sequence given by $7n+1$																																																					
5.3 Which is the first term above 50 in the sequence $5n+7$																																																					

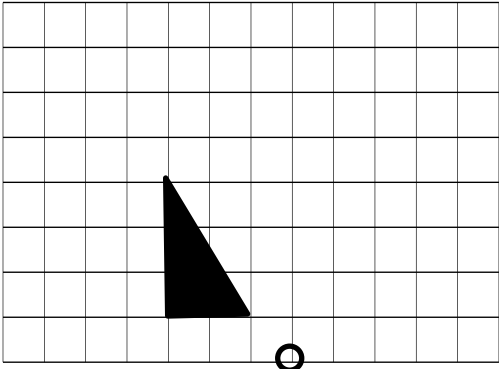
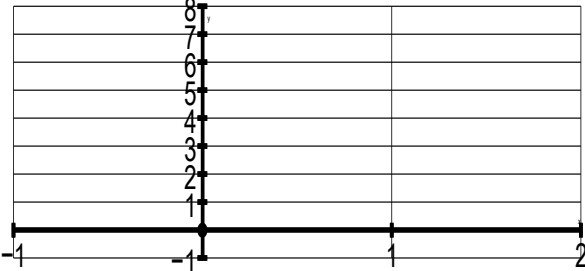
Grade D Practice sheet 6 – do your calculations in your exercise book

Number		6 Complete the table for: $y = 0.5x + 2$	Enlarge by a scale factor of 2, using O as the centre of enlargement																								
1.1 Write down 0.7^2		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>	x	0	1	2	y																				
x	0	1	2																								
y																											
1.2 Find $2^3 + 3^3$																											
Calculating		Plot the graph																									
2 Share £45 in the ratio 3:7																											
3.1 Find: $\frac{4}{3}$ of £27																											
3.2 Evaluate: $\frac{7}{3} - \frac{5}{7}$																											
3.3 Evaluate: $\frac{1}{4} + \frac{1}{3} + \frac{1}{12}$																											
3.4 Find: $8 \div \frac{2}{3}$																											
Algebra:		8 What type of angle does an arrowhead have?																									
4.1 Solve: $10x - 3 = 2$		9. 																									
4.1 Solve $\frac{x}{10} = 0.5$																											
5.2 Find the first three terms of the sequence given by $3n-5$																											
5.3 Is the number 46 in the sequence given by $50n - 4$																											
		Write down an expression for B in terms of A																									
		What is the value of $2A + 2B$																									
			Jack tosses three coins. List all possible outcomes in the table below																								
			<table border="1" style="width: 100%;"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>																								
			P(Jack gets at least one Head)=																								
			A spinner has three colours. Find the value of p																								
			<table border="1" style="width: 100%;"> <tr> <td>Colour</td> <td>red</td> <td>green</td> <td>Blue</td> </tr> <tr> <td>Probability</td> <td>p</td> <td>p</td> <td>0.6</td> </tr> </table>	Colour	red	green	Blue	Probability	p	p	0.6																
Colour	red	green	Blue																								
Probability	p	p	0.6																								

Grade D Core Skills Practice Sheet 7

<p>Number</p>		<p>6 Complete the table for:</p>	<p>Enlarge by a scale factor of 2, using O as the centre of enlargement</p>								
<p>Find the lowest integer x such that</p> $\sqrt{75} < x < \sqrt{85}$		$y = 6 - x$ <table border="1" data-bbox="795 368 1182 443"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>	x	0	1	2	y				
x	0	1	2								
y											
<p>1.2 Write down $\sqrt{1.44}$</p>		<p>Plot the graph</p>									
<p>Calculating</p>											
<p>2 Share £40 into the ratio 1:2:5</p>											
<p>3.1 Find:</p> $\frac{7}{20} \text{ of } \text{£}30$											
<p>3.2 Evaluate:</p> $\frac{2}{9} + \frac{1}{4}$											
<p>3.3 Evaluate:</p> $\frac{1}{4} - \frac{1}{3}$											
<p>3.4 Find:</p> $12 \times \frac{7}{6}$											
<p>Algebra:</p>		<p>8 One angle in a parallelogram is 42°. What will the other different angle equal?</p>	<p>In a game of chance, the probability of winning is 0.3 and the probability of losing is $\frac{5}{20}$. What is the probability of the game being a tie?</p>								
<p>4.1 Solve: $11 - 2x = 10$</p>		<p>9. Find x</p>									
<p>4.1 Solve</p> $\frac{100}{2x} = 2$											
<p>5.2 Find the first three terms of the sequence given by the formula $30 - 7n$</p>			<p>Sally spends £50 on ingredients to make 10 cakes. How much must each cake be sold for to make a 10% profit?</p>								

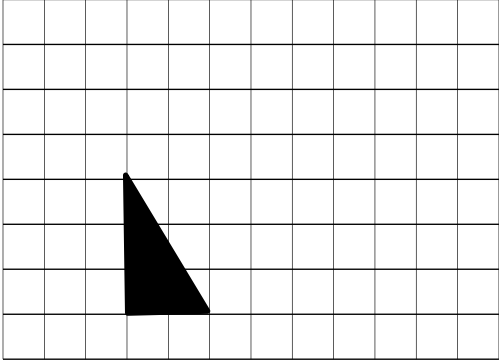
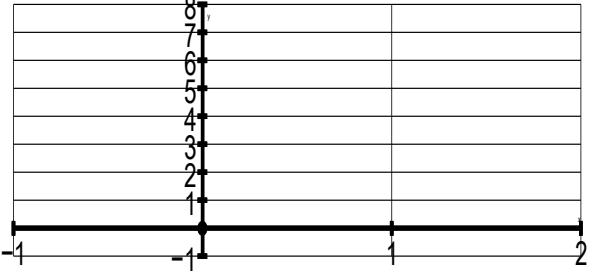
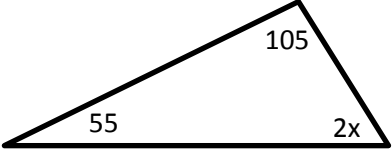
Grade D Core Skills Practice Sheet 8

Number											
1. What integer is $\sqrt[3]{28}$ closest to?		6 Complete the table for: $y = 5 - 3x$	Enlarge by a scale factor of 2, using O as the centre of enlargement								
Calculating		<table border="1" data-bbox="792 437 1180 512"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>	x	0	1	2	y				
x	0	1	2								
y											
2 Share £42 in the ratio 2:3		Plot the graph									
3.1 Find: $\frac{3}{8}$ of \$84											
3.2 Evaluate: $\frac{2}{5} + \frac{3}{7}$											
3.3 Evaluate: $\frac{2}{5} - \left(\frac{1}{4} + \frac{1}{2}\right)$											
3.4 Find: $27 \times \frac{8}{54}$			In a game, the probability of winning and losing is in the ratio 7:13. What is the percentage chance of winning?								
Algebra:		8. One angle in an isosceles triangle is 40° . What could the other two angles be?									
4.1 Solve: $10 + 2x = 0$											
4.1 Solve $\frac{8x}{3} = 16$											
5.2 Find the 5 th term of the sequence given by the formula $\frac{20}{n}$			Suggest two numbers to make the following correct: $-11 - \square = -3$								

Grade D Practice sheet 9 – do your calculations in your exercise book

Number		6 Complete the table for: $y = 2.5x + 1$	Enlarge by a scale factor of 2, using O as the centre of enlargement																																																	
1.1 Write down $(-9)^2$																																																				
1.2 Find 4^3		<table border="1"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </table>		x	0	1	2	y																																												
x	0	1		2																																																
y																																																				
Calculating		Plot the graph																																																		
2 Share £32 in the ratio 3: 5																																																				
3.1 Find: $\frac{2}{5}$ of £70																																																				
3.2 Evaluate: $\frac{3}{5} + \frac{1}{4}$			Samantha rolls two dice and finds the difference of the two numbers together. Complete the table below to show all possible outcomes																																																	
3.3 Evaluate: $\frac{5}{7} - \frac{1}{3}$			<table border="1"> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		1	2	3	4	5	6	1							2							3							4							5							6						
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4																																																				
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3.4 Find: $13 \div \frac{1}{4}$		8 What is the order of rotational symmetry of a parallelogram																																																		
Algebra:		9.																																																		
4.1 Solve: $8x - 3 = 37$																																																				
4.1 Solve $\frac{x}{3} - 1 = 7$																																																				
5.2 Find the first three terms of the sequence given by $3n+2$																																																				
5.3 Is 35 in the sequence $3n+6$																																																				
		Which angle corresponds to D																																																		
		What is the value of A+B																																																		
			The probability of rain per day is 0.3. How many days would you expect it NOT to rain in the next 20 days																																																	

Grade D Core Skills Practice Sheet 10

<p>Number</p>		<p>6 Complete the table for:</p>	<p>What is the area of this triangle if it is enlarged by a scale factor of 2</p>								
<p>1.1 Estimate $\sqrt{101}$</p>		<p>$y = x + 2$</p>									
<p>1.2 Write down $\sqrt[3]{8}$</p>											
<p>Calculating</p>		<table border="1" data-bbox="795 370 1182 443"> <tbody> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	x	0	1	2	y				
x	0	1	2								
y											
<p>2 Share £25 in the ratio 3:7</p>		<p>Plot the graph</p>									
<p>3.1 Decrease \$400 by $\frac{1}{10}$</p>											
<p>3.2 Evaluate: $\frac{5}{7} - \frac{1}{2}$</p>											
<p>3.3 Evaluate: $\frac{1}{3} + \frac{2}{5}$</p>			<p>A spinner has five equal sections on. The sections are coloured red, green or yellow. The probability of getting red is three times that of green. Sketch the spinner below</p>								
<p>3.4 Find: $10 \times \frac{7}{2}$</p>											
<p>Algebra:</p>		<p>8 Write an expression for the total price of n pens costing 32pence each and x pencils costing 17 pence each:</p>									
<p>4.1 Solve: $5(3x + 2) = 55$</p>		<p>9. Find x</p>									
<p>4.1 Solve $\frac{x}{2} - 7 = 2$</p>											
<p>5.2 Find the 10th term in the sequence given by the formula $3n + 7$</p>			<p>Find the MEAN and MEDIAN of: 5, 7, 3, 5</p>								