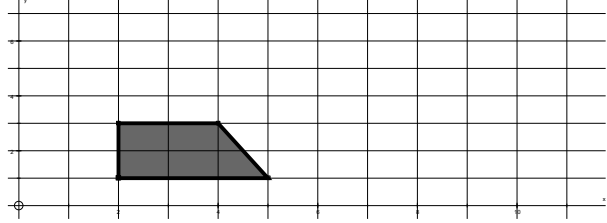
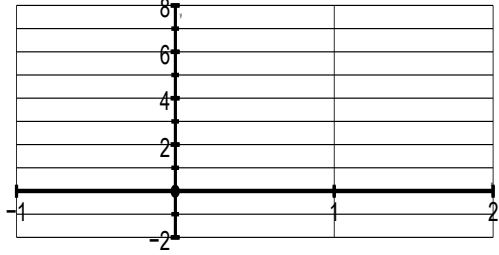
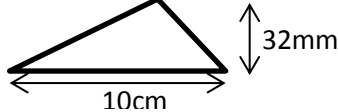
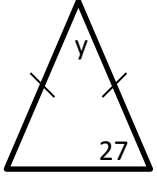
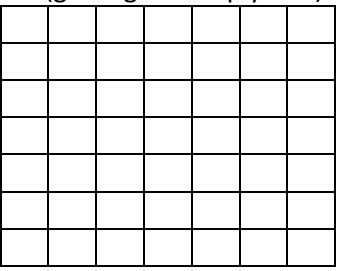
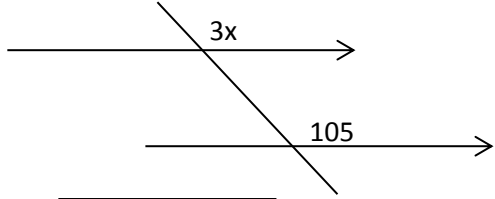


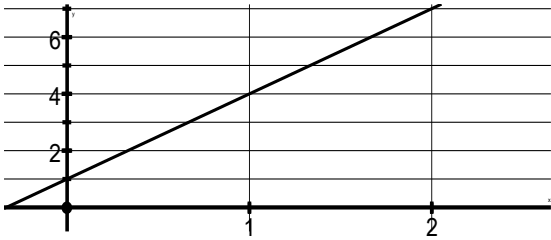
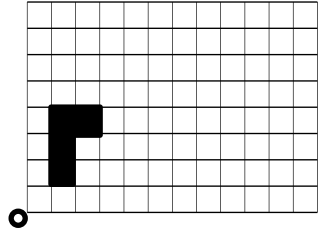
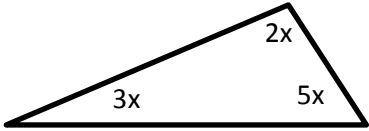
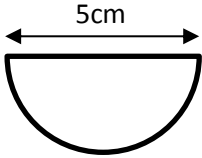
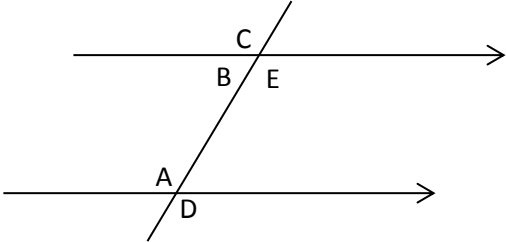
Level 6 – Core Skills Practice Sheet 1

Section A: Numbers		9. Plot the graph $y = 3x + 1$	Enlarge this shape by a factor of 2 from O									
1i Write 0.3 as a fraction												
1ii Write $\frac{7}{25}$ as a decimal		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; text-align: center;">x</td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td style="text-align: center;">y</td> <td></td> <td></td> <td></td> </tr> </table>	x				y					
x												
y												
Section B: Calculating			17. Find the area of this triangle in cm^2									
2. Increase £400 by 23%			Section D: Shape and Space									
3. Bill, Ben and Bob share £400 into the ratio 1:2:5. How much does Ben receive?		12. Find y	18. A circle has a radius of 4cm. Find its area and circumference.	A= C=								
4. There was a 25% discount in a sale. A boy paid £30 for a pair of jeans in the sale. What was the original price?			Section E: Handling Data									
5i calculate $\frac{3}{4} + \frac{1}{5}$		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">$y =$</td> </tr> </table>	$y =$									
$y =$												
5ii calculate $5 \times \frac{2}{3}$		13. Find x										
Section C: algebra			20. Two dice are spun and the numbers are added together. Find P(getting a multiply of 3)									
5iii calculate $30 \div \frac{3}{4}$		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">$x =$</td> </tr> </table>	$x =$	P(multiple of 3)=								
$x =$												
7.1 Solve $3x + 2 = 35$			21. P(rain tomorrow)=0.3 What is the P(it does not rain)?									
7.2. Solve $4(5x - 1) = 36$												
7.3. Solve $\frac{x}{2} = 11$												
8. Find the nth term of the sequence: 12, 14, 16, 18 ...												

Level 6 Core Skills Practice Sheet 2

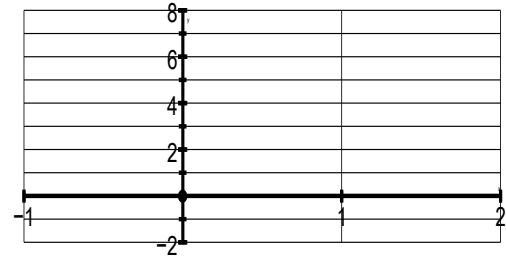
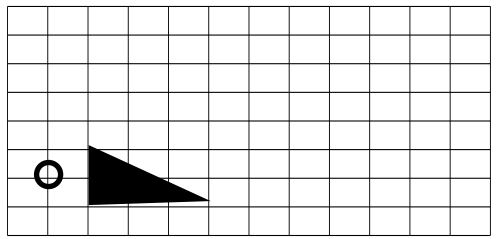
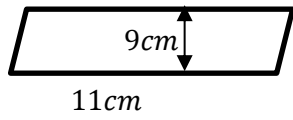
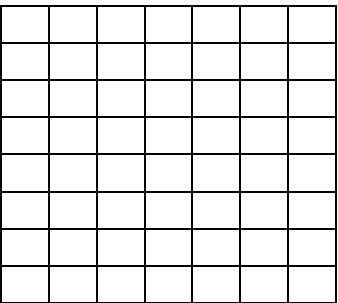
Section A: Numbers		9. Plot the graph $y = 2x + 3$	Enlarge this shape by a factor of 2 from O	
1i Write 0.22 as a percentage				
1ii Write $\frac{3}{20}$ as a decimal				
Section B: Calculating				
2. Increase £300 by 15%				
3. Carl and Cindy share £200 in the ratio 3: 7. How much does Carl receive?				
4. If you need 300g of chocolate to make a cake for 10 people. How much would you need for 3 people?		17. Find the area of this parallelogram.		
5i calculate $\frac{2}{5} - \frac{1}{3}$				
5ii calculate $7 \times \frac{3}{8}$		Section D: Shape and Space		
5iii calculate $20 \div \frac{5}{3}$		12. Find y	18. A circle has a diameter of 10cm. Find its area	
Section C: algebra				
7.1 Solve $5x - 7 = 43$		13. Find x	Section E: Handling Data	
7.2. Solve $3(2x - 1) = 39$			20. Two dice are spun and the numbers are multiplied together. Find P(getting an even number)	
7.3. Solve $\frac{x}{3} + 1 = 4$				
8. Find the nth term of the sequence: 8, 11, 14, 17 ...				
			21. P(winning)=0.27 What is the P(not winning)?	

Level 6 Core Practice Sheet 3

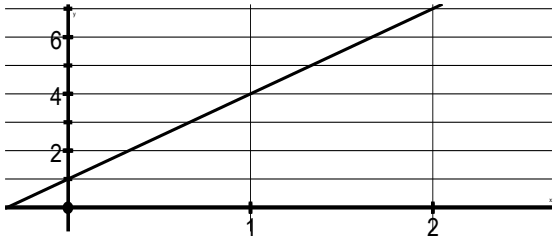
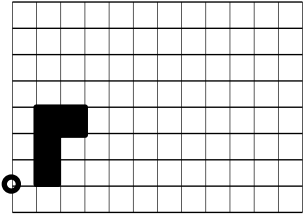
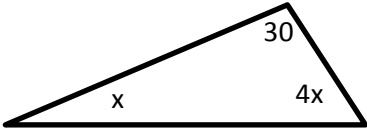
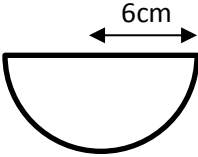
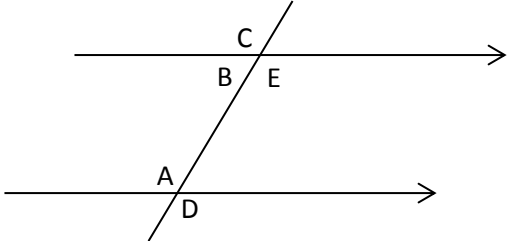
Section A: Numbers		9. Find the gradient of the following line		Enlarge by a scale factor of 2, using O as the centre of enlargement 	
1i Write 0.4 as a percentage					
1ii Write $\frac{9}{40}$ as a percentage		Gradient= 	Section D: Shape and Space		
Section B: Calculating					
2. Decrease £30 by 12%		12. Find x			17. A triangle has an area of 20cm^2 and a base of 10cm^2 . What is its height?
3. Orange and water is mixed in the ratio of 3:5. If 60ml is made in total, how much water was used?					
4. A recipe for 7 people requires 2.8kg of beef. How much would you need for 3 people?					
5i calculate $\frac{2}{3} + \frac{3}{5}$					18. Find the area of this semi-circle
5ii calculate $12 \times \frac{3}{4}$					
5iii calculate $7 \div \frac{1}{10}$					
Section C: algebra		13. Which angle corresponds to A?			
7.1 Solve $8 + 3x = 2$					
7.2. Solve $5(2x + 1) = 10$					
7.3. Solve $\frac{3x + 1}{2} = 7$					
8. Find the nth term of the sequence: 15,11,7 ...					21. $P(\text{winning})=0.27$ a) What is the $P(\text{not winning})$? b) How many times would you expect to win in 50 games?

Section A: Numbers		9. Plot the graph $y = 2x - 1$	Enlarge this shape by a factor of 2 from O								
1i Write 0.7 as a fraction				<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>x</td><td></td><td></td><td></td></tr> <tr><td>y</td><td></td><td></td><td></td></tr> </table>	x				y		
x											
y											
1ii Write $\frac{7}{20}$ as a decimal			17. Find the area of this triangle in cm^2								
Section B: Calculating											
2. Increase £300 by 14%		12. Find y	18. A circle has a radius of 4cm. Find its area								
3. Mike and Tim share £33 into the ratio 3:7. How much does Mike receive?				<div style="display: inline-block; border: 1px solid black; padding: 5px; margin-left: 20px;">$y =$</div>							
4. An antique increases by 10% and is now worth £33. How much was it worth before the increase		13. Find x	Section E: Handling Data								
5i calculate $\frac{1}{3} + \frac{3}{4}$			<div style="display: inline-block; border: 1px solid black; padding: 5px; margin-left: 20px;">$x =$</div>	20. Two dice are spun and the numbers are added together. Find P(getting a number greater than 7)							
5ii calculate $4 \times \frac{2}{7}$		8. Find the n th term of the sequence: 8,11,14,17, ...		P(a number greater than 7)=							
5iii calculate $15 \div \frac{5}{7}$					21. $P(\text{rain tomorrow})=0.51$ What is the $P(\text{it does not rain})?$						
Section C: algebra											
7.1 Solve $5x - 2 = 18$											
7.2. Solve $3(2x + 1) = 33$											
7.3. Solve $\frac{x}{3} = 7$											

Level 6 Core Skills Practice Sheet 5

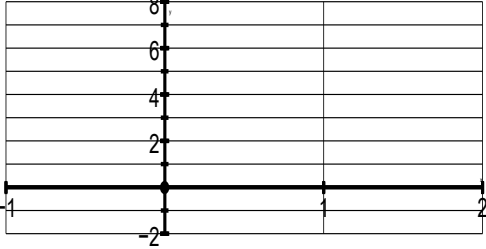
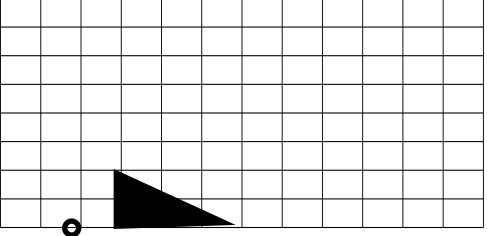
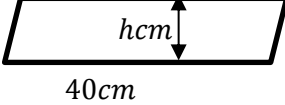
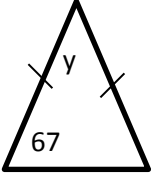
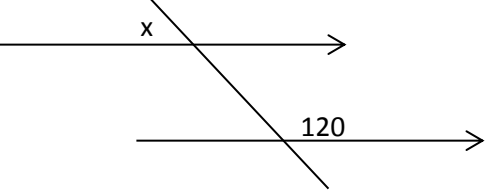
Section A: Numbers		9. Plot the graph $0.5x + 3$	Enlarge this shape by a factor of 2 from O			
1i Write 0.31 as a percentage						
1ii Write $\frac{11}{50}$ as a decimal						
Section B: Calculating						
2. Increase £200 by 35%						
3. John and Margaret share £40 in the ratio 3:7. How much does John receive?						
4. If you need 5g of saffron to make a meal for 8 people. How much would you need for 20 people?						
5i calculate $\frac{5}{7} - \frac{1}{4}$						
Section D: Shape and Space		17. Find the area of this parallelogram.				
5ii calculate $3 \times \frac{11}{2}$						
5iii calculate $14 \div \frac{7}{5}$						
Section C: algebra		18. A circle has a radius of 4cm, find its circumference				
7.1 Solve $5 + 11x = 27$						
7.2. Solve $4(2x - 3) = 12$		Section E: Handling Data				
7.3. Solve $\frac{x}{5} - 2 = 7$		20. Two dice are spun and the numbers are added together. Find P(getting an odd number)				
						
8. Find the nth term of the sequence: 14, 11, 8, 5, ...		21. $P(\text{winning a match}) = 0.72$ What is the $P(\text{not winning})$?				

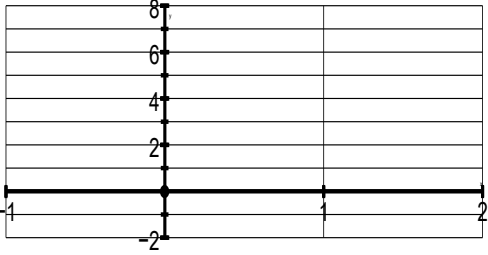
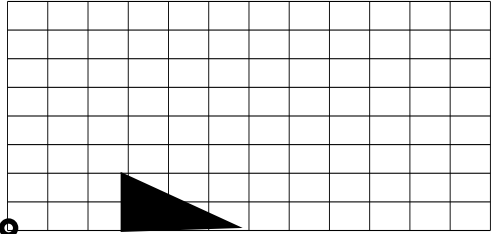
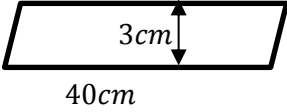
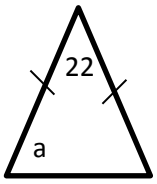
Level 6 Core Practice Sheet 6

Section A: Numbers		9. Find the y-intercept of the following line 	Enlarge by a scale factor of 2, using O as the centre of enlargement 
1i Write 0.07 as a percentage			
1ii Write $\frac{3}{9}$ as a percentage		Section D: Shape and Space	17. A rectangle has an area of $5cm^2$ and a base of $20cm^2$. What is its height?
Section B: Calculating			
2. Decrease £25 by 4%		12. Find x 	18. Find the area of this semi-circle 
3. Red and White paint is mixed in the ratio of 2:7. 990ml is made in total, how much white was used?			
4. A recipe for 8 people requires 1.2kg of chicken. How much would you need for 12 people?			
5i calculate $\frac{3}{11} + \frac{2}{3}$		Section C: algebra	21. P(getting a red token)=0.6 What is the probability of not getting a red token?
5ii calculate $15 \times \frac{7}{3}$			
5iii calculate $11 \div \frac{1}{5}$		13. Which angle is supplementary to A 	
7.1 Solve $5 = 3 + 2x$			
7.2. Solve $3(10x + 1) = 6$			
7.3. Solve $\frac{20}{x} = 4$			
8. Find the nth term of the sequence: 15, 15.5, 16, 16.5, ...			

Level 6 Core Practice Sheet 7

Section A: Numbers		9. Find the coordinate where the line below intersects $x = 1$ 	Enlarge by a scale factor of 2, using O as the centre of enlargement 	
1i Write 28% as a fraction				
1ii Write 0.125 as a percentage				
Section B: Calculating		Section D: Shape and Space	17. What is the area of a parallelogram with a base of 8cm and a perpendicular height of 3.2cm	
2. Increase £41 by 3%				
3. The angles in a triangle are in the ratio 1:3:6. What is the middle sized angle				
4. A recipe for 8 people requires 120g of carrots. How much would you need for 9 people?				
5i calculate $\frac{2}{7} + \frac{1}{3}$		12. Find x 	18. Find the area of this circle 	
5ii calculate $8 \times \frac{11}{4}$				
5iii calculate $12 \div \frac{1}{3}$				
Section C: algebra		13. What is the sum of A and B equal to? 	21. $P(\text{getting a red token})=0.4$ How many red tokens would you expect in 30 goes of the game?	
7.1 Solve $8x - 5 = 15$				
7.2. Solve $4(3x - 1) = 32$				
7.3. Solve $\frac{x}{4} + 1 = 2$				
8. Find the nth term of the sequence: 9, 13, 17, 21, ...				

Section A: Numbers		9. Sketch the two lines: $x = 1$ and $y = 2$	Enlarge this shape by a factor of 2 from O		
1i Write 0.07 as a percentage					
1ii Write $\frac{7}{50}$ as a percentage					
Section B: Calculating					
2. Increase £210 by 5%					
3. Share £32 in the ratio 7:3					
4. A plump rabbit puts on 10% of this weight and now weighs 550g. How much did it weigh before?					
5i calculate $\frac{1}{10} + \frac{3}{5}$					
Section D: Shape and Space		17. This parallelogram has an area of 20cm^2 . What is its height?			
5ii calculate $4 \times \frac{3}{10}$					
5iii calculate $14 \div \frac{2}{5}$					
Section C: algebra		12. Find y	18. A circle has a radius of 3cm. Find its area		
7.1 Solve $4x + 1 = 9$					
7.2. Solve $10(x + 1) = 40$		13. Find x	Section E: Handling Data		
7.3. Solve $\frac{x-3}{4} = 8$			20. Three coins are tossed and the results are recorded. List all the possible outcomes and find the probability of getting 3 tails		
8. Find the nth term of the sequence: 4, 10, 16, 22 ...					21. $P(\text{snow})=0.921$. Find the probability of it not snowing

Section A: Numbers		9. Sketch the line $y = x$ and $y = 3$ 	Enlarge this shape by a factor of 2 from O 	
1i Write 23% as a decimal				
1ii Write $\frac{3}{10}$ as a percentage				
Section B: Calculating				
2. Increase £120 by 2%		17. Find the area: 		
3. Share £200 in the ratio 3:5				
4. An item decreases in value by 10% and costs £36. How much was it before?				
5i calculate $\frac{1}{3} + \frac{2}{9}$				
Section D: Shape and Space		18. A circle has a radius of 5cm. Find its circumference Area=		
5ii calculate $5 \times \frac{2}{4}$				
5iii calculate $20 \div \frac{2}{5}$				
Section C: algebra				
7.1 Solve $3x - 1 = 29$		Section E: Handling Data		
7.2. Solve $4(2x - 1) = 20$		20. Two identical spinners split into red, green and blue equally are spun. List all the outcomes		
7.3. Solve $\frac{x}{3} = 9$				
8. Find the nth term of the sequence: 4,7,10,13, ...				
		12. Find y	21. $P(\text{winning})=0.81$. Find the probability of not winning	
				
		13. Find x		
		