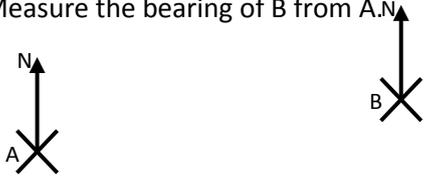
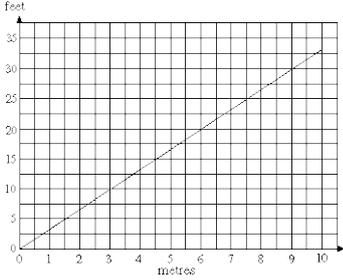
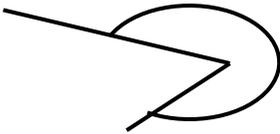
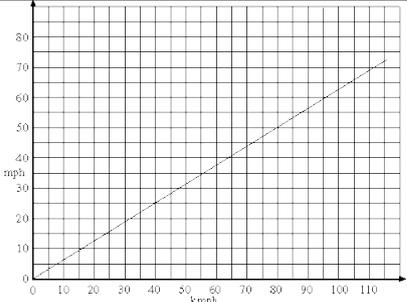
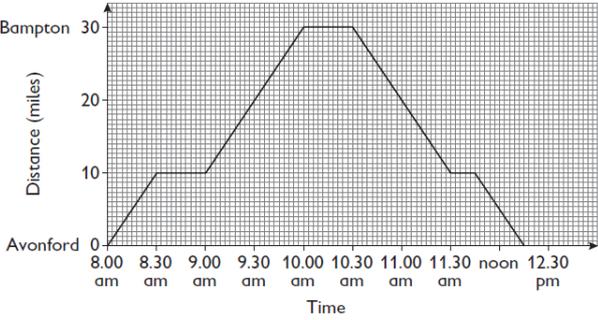
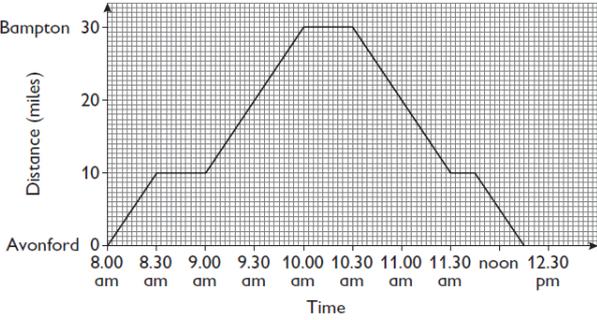
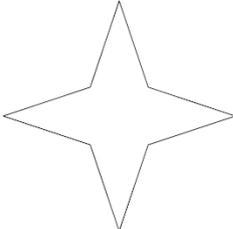
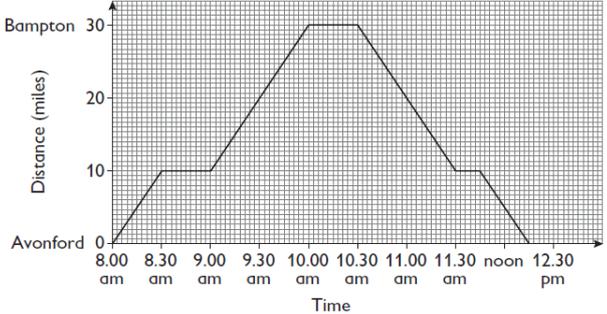
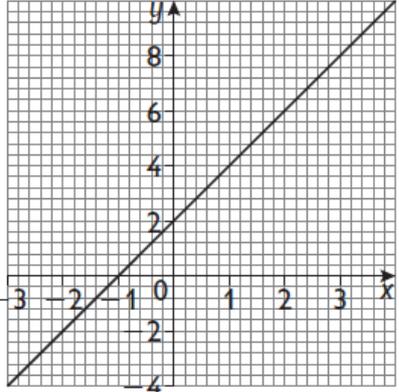


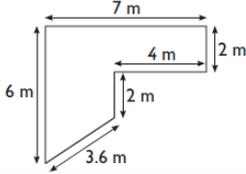
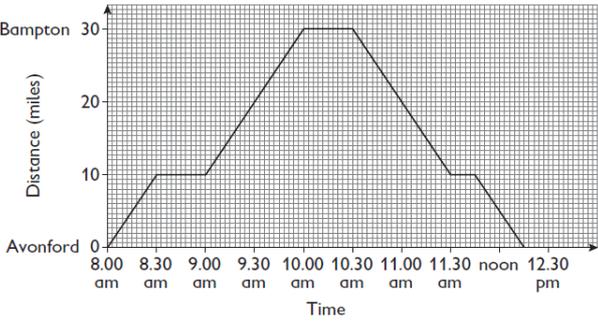
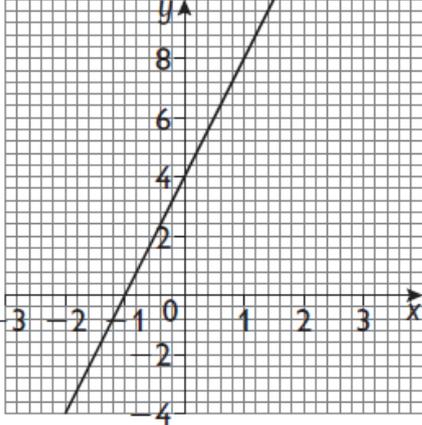
Homework Sheet 1	
1: Double 63	11: In the space below, draw an angle of $30^\circ$
2: Calculate $-12 - 11$	12: Two angles are on a straight line. One of the angles is $43^\circ$ . Work out the size of the other angle.
3: Calculate $3^3$	13: A scale drawing has a scale of 1cm:2km. Work out the real life distance of a length of 5 cm on the map.
4: Calculate $\sqrt{25}$	14: Measure the bearing of B from A. <div style="text-align: center;">  </div>
5: Write 24 as a product of primes	15: Sam has 3 cards and he buys $a$ more. Write an expression for the number of cards Sam has.
6: <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>Use this graph to convert 6 metres into feet.</p> </div> </div>	16: Simplify $a + a + a + a + b + b + b$
7: A train journey lasting an hour and a half starts at 4:15 pm. What time does it finish?	17: Find the value of $3a + b$ when $a = 5$ and $b = 2$
8: A car travels for 3 hours at an average speed of 45mph. How far does it travel?	18: Multiply out $3(x + 4)$
9: Calculate 50% of 96	19: A bag contains 3 black counters, 4 red counters and 5 blue counters. A counter is taken at random. Write down the probability that it is a black counter.
10: Convert 0.37 to a percentage	20: $6 \times 7$

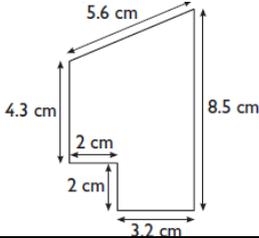
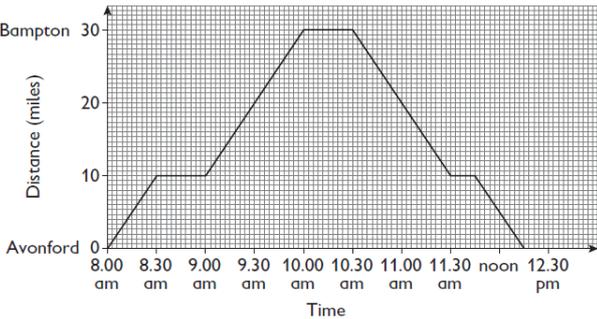
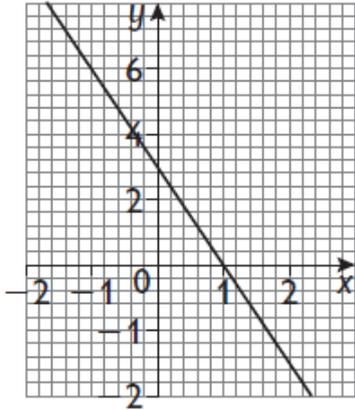
Homework Sheet 2	
1: Multiply 4.7 by 1000	11: Measure the angle below 
2: Calculate $17 + -9$	12: Work out the size of the interior angles in a regular hexagon.
3: Calculate $11^2$	13: A map has a scale of 1:25000. Two towns are 15cm apart on the map. How far apart are they in real life? Give your answer in metres.
4: Calculate $\sqrt{4}$	14: The bearing of B from A is $075^\circ$ . Work out the bearing of A from B.
5: Write 56 as a product of primes	15: Malik's suitcase weighs $k$ kg. His sister's suitcase weighs 2 kg more than Malik's. Write an expression for the total weight of the two suitcases.
6: 	16: Simplify $2 \times p \times 2 \times p$
Use this graph to convert 25 mph to kmph.	
7: My favourite film starts on TV at 18:10. The film lasts for 2 hours and 17 minutes. What time will it finish?	17: Find the value of $2t - 5u$ when $t = 2$ and $u = 3$
C8: A person walks for half an hour and covers a distance of 2.5 kilometres. What is the person's average speed? Give your answer in kilometres per hour.	18: Expand $4(9 - x)$
C9: Calculate 7% of 54 metres	19: A bag contains black counters, red counters and blue counters. Kim reaches into the bag 50 times, each time noting the colour and replacing the counter. Kim pulls out 10 black counters. Estimate the probability of the next counter Kim pulls out being a black counter.
10: Convert 0.03 to a percentage	20: $7 \times 12$

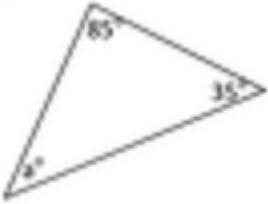
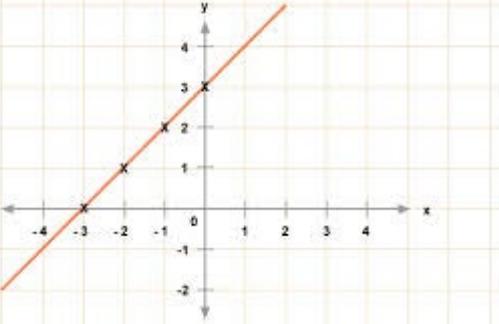
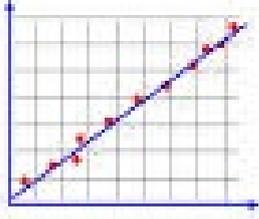
Homework Sheet 3	
1: Double 79	11: The names of the months of the year are put into a hat and drawn out at random. Write down the probability that the name starts with a vowel.
2: $-5 + (-7)$	C12: Convert 3 inches into centimetres.
3: Calculate $11^2$	13: Find the perimeter of a rectangle with a base of 12 cm and a height of 7 cm.
4: Write 78 as a product of primes	14: The coordinate $(2, a)$ lies on the line $y = 3$ . Write down the value of $a$ .
<p>5: Find the distance from Avonford to Bampton</p> <p>The travel graph shows Amy's bicycle ride from Avonford to Bampton.</p> 	15: Write down the gradient of the line $y = 3x$ .
6: A train journey lasting three hours and 37 minutes starts at 4:15 pm. What time does it finish?	16: Multiply 3720 by 0.1
C7: Calculate 147% of £65	17: Calculate $3 \times (2+3)^2$
<p>8: A circle is broken up into 4 unequal sections. One section has an angle of <math>78^\circ</math>, one has an angle of <math>154^\circ</math>. The other two sections have the same size angle. Calculate the size of the angle in the final two sections.</p>	C18: Use a calculator to work out $\frac{3 \times 20}{21 - 4}$
9: Simplify $3x - 2y + 5x - 4y$	<p>19: Draw the lines of symmetry on this shape:</p> 
10: If $y = 3x - 5$ , find the value of $y$ when $x = 2$	20: $9 \times 12$

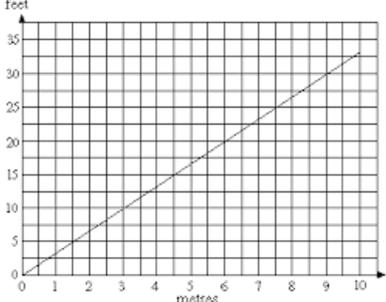
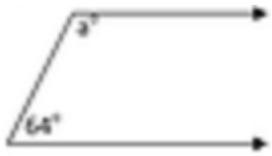
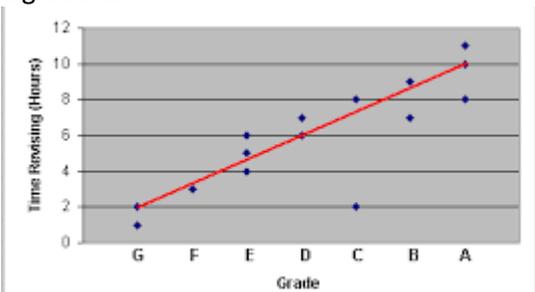
<p>Homework Sheet 4</p>	
<p>1: Fill in the box with the missing number.</p> $42 + \boxed{\phantom{00}} = 81$	<p>11: The names of the months of the year are put into a hat and drawn out at random. Write down the probability that the name contains the letter 'e'.</p>
<p>2: <math>(-4) \times 8</math></p>	<p>C12: Convert 10 litres into pints.</p>
<p>3: Calculate <math>6^3</math></p>	<p>13: Find the perimeter of a rectangle with a base of 4.5 cm and a height of 8 cm.</p>
<p>4: Write 100 as a product of primes</p>	<p>14: The coordinate <math>(2, c)</math> lies on the line <math>y = 3x</math>. Write down the value of <math>c</math>.</p>
<p>5: How many times does Amy stop altogether? The travel graph shows Amy's bicycle ride from Avonford to Bampton.</p> 	<p>15: Write down the gradient of the line <math>y = 5x</math>.</p>
<p>6: A flight lasting 3 hours and 45 minutes lands at 7:35 pm. What time did the flight take off?</p>	<p>16: Multiply 3720 by 0.001</p>
<p>C7: Calculate 134% of 73kg</p>	<p>17: Calculate <math>20 + \sqrt{12 \times 3}</math></p>
<p>8: A rhombus has acute angles of <math>48^\circ</math>. Work out the size of the obtuse angles.</p>	<p>C18: Use a calculator to work out <math>\frac{4.3 \times 7.6}{5.1 + 3.5}</math></p>
<p>9: Write an expression that is the result of dividing <math>p</math> by 7 then subtracting 4</p>	<p>19: Draw the lines of symmetry on this shape:</p> 
<p>10: If <math>A = \frac{1}{2}bh</math>, find <math>A</math> if <math>b = 12</math> and <math>c = 5</math>.</p>	<p>20: <math>8 \times 12</math></p>

Homework Sheet 5	
1: Halve 314	11: The names of the months of the year are put into a hat and drawn out at random. Write down the probability that the name contains two consecutive vowels.
2: $(-15) - (-6)$	C12: Convert 72 km into miles.
3: Calculate $\sqrt{196}$	13: Find the area of a triangle with a base of 12.5 cm and a height of 8 cm.
4: Write 126 as a product of primes	14: The coordinate $(f, 9)$ lies on the line $y = x - 5$ . Find the value of $f$ .
5: At what time does Amy arrive in Bampton? The travel graph shows Amy's bicycle ride from Avonford to Bampton. 	15: Find the equation of this line 
6: A party lasting 3 hours and 40 minutes finishes at 10:30 pm. What time did the party start?	16: Divide 3720 by 0.001
7: Convert $\frac{7}{25}$ into a percentage	17: Calculate $3 + 2^3 \times 5$
C8: Calculate the sum of the interior angles in an octagon.	C18: Use a calculator to work out $\frac{2.5^2 \times 12.3}{14.7 - 9.5}$
9: Expand $x(4x - 9)$	19: Give the image when the coordinate $(3, 2)$ is reflected in the line $x = 2$ .
10: If $A = \frac{1}{2}bh$ , find $A$ if $b = 13$ and $c = 9$ .	20: $9 \times 13$

<p>Homework Sheet 6</p>	
<p>1: Fill in the box</p> $231 - \boxed{\phantom{000}} = 123$	<p>11: The names of the months of the year are put into a hat and drawn out at random. Write down the probability that the name <b>does not</b> contain the letter 'b'.</p>
<p>2: <math>(-6) \times (-8)</math></p>	<p>C12: Convert 35 pints into litres.</p>
<p>3: Calculate <math>7^3</math></p>	<p>C13: Find the perimeter of this shape</p> 
<p>4: <math>56 = 2 \times 2 \times 2 \times 7</math>     <math>42 = 2 \times 3 \times 7</math> Find the highest common factor of 56 and 42</p>	<p>14: The coordinate <math>(7, g)</math> lies on the line <math>x + y = 9</math>. Write down the value of <math>g</math>.</p>
<p>5: What is Amy's average speed on the way to Bampton?</p> <p>The travel graph shows Amy's bicycle ride from Avonford to Bampton.</p> 	<p>15: Find the equation of this line</p> 
<p>6: I catch a direct train to London that takes 1 hour and 17 minutes. If I catch the train at 8:56 am, what time will I arrive in London?</p>	<p>16: Sam buys 4 packets of crisps at £0.59 each. Calculate the price Sam pays.</p>
<p>C7: Calculate 199% of £230</p>	<p>17: Calculate <math>6 \times 3^2 - 15 \times 2</math></p>
<p>C8: Calculate the size of an exterior angle of a regular decagon.</p>	<p>C18: Use a calculator to work out <math>\frac{\sqrt{17.4 + 26.8}}{0.2 \times 3.2}</math></p>
<p>9: Write an expression for the mean of <math>a</math>, <math>b</math> and <math>c</math>.</p>	<p>19: Give the image when the coordinate <math>(3, 2)</math> is rotated <math>180^\circ</math> centre <math>(0, 0)</math>.</p>
<p>10: If <math>A = \frac{1}{2}(a + b)h</math>, then calculate <math>A</math> if <math>a = 8</math>, <math>b = 6</math>, and <math>h = 2.5</math>.</p>	<p>20: <math>11 \times 13</math></p>

Homework Sheet 7	
<p>1: Fill in the missing number</p> $\square - 89 = 124$	<p>11: The names of the months of the year are put into a hat and drawn out at random. Write down the probability that the name <b>does not</b> contain the letter 'y'.</p>
<p>2: <math>(-7) - (-19)</math></p>	<p>C12: Convert 80kg into stone.</p>
<p>3: Calculate <math>\sqrt{1600}</math></p>	<p>C13: Find the area of this shape</p> 
<p>4: <math>84 = 2 \times 2 \times 3 \times 7</math>    <math>112 = 2 \times 2 \times 2 \times 2 \times 7</math> Find the lowest common multiple of 84 and 112</p>	<p>14: The coordinate <math>(k, 1)</math> lies on the line <math>y = 3x - 5</math>. Find the value of <math>k</math>.</p>
<p>5: What is Amy's speed before her first stop? The travel graph shows Amy's bicycle ride from Avonford to Bampton.</p> 	<p>15: Find the equation of this line</p> 
<p>6: My favourite film starts on TV at 18:45. The film lasts for 3 hours and 22 minutes. What time will it finish?</p>	<p>16: Crisps are sold in boxes of 30. Each packet costs £0.39. Work out the cost of a box.</p>
<p>C7: Convert <math>\frac{11}{12}</math> to a percentage</p>	<p>17: Calculate <math>\sqrt{5^2 - 4^2}</math></p>
<p>C8: A regular polygon has interior angles of 160 degrees. Calculate the number of sides of the polygon.</p>	<p>C18: Use a calculator to work out <math>\frac{\sqrt{32.8 \times 6.9}}{9.6 + 7.8}</math></p>
<p>9: Expand <math>4f(3 - 8f^2)</math></p>	<p>19: Give the image when the coordinate <math>(3, 2)</math> is translated using vector <math>\begin{pmatrix} -2 \\ 5 \end{pmatrix}</math>.</p>
<p>10: If <math>a = \frac{v-u}{t}</math>, find <math>a</math> if <math>v = 0</math>, <math>u = 10</math>, and <math>t = 5</math></p>	<p>20: <math>12 \times 12</math></p>

Homework Sheet 8	
1: Double 147	11: Calculate $3 + 9 \times 5 - 10$
2: Find the LCM of 78 and 52	12: The coordinate (3, 7) is translated to the coordinate (4, 9). Give the translation vector.
3: Tom leaves for work at 7:19 am and arrives at 8:06 am. Work out how long it takes Tom to get to work.	13: Write a list of 5 numbers with a median of 9.
C4: Increase £297 by 39%	14: Solve the equation $p - 7 = 17$
5: Find the value of angle $a$ 	15: Jack and Jill share money in the ratio 3:5. If Jill gets £120, work out how much Jack gets.
6: Expand $8t(3 - 2t)$	16: For an object travelling at a fixed speed, the distance it travels is proportional to the time taken. When the object travels for 5 seconds, it goes 1 metre. Work out how long it takes to go 10 metres.
7: In a bag there are red, blue and green counters. The number of red and blue counters is the same. There are twice as many green counters as red. Work out the probability of taking a red counter.	17: Draw the side elevation of this shape 
8: The perimeter of a square is 36 cm. Find its area.	18: Write down the $n$ th term of this sequence 2, 9, 16, 23, ...
9: Write down the equation of the line 	19: Describe the correlation shown in this scatter graph 
10: Estimate the value of $3.9 \times 12.9$	20: $9 \times 12$

Homework Sheet 9	
1: Multiply $83000 \times 0.01$	11: Calculate $\sqrt{3^2 + 4^2}$
2: Find the HCF of 54 and 72	12: A coordinate (1, 2) is rotated $90^\circ$ degrees clockwise to give the coordinate (2, 1). Give the coordinate of the centre of rotation.
3: Use this graph to convert 7.5 metres to feet. 	13: Write a list of 6 numbers with a mode of 1, a median of 2 and a mean of 3.
C4: Increase \$720 by 45%	14: Solve the equation $4q - 9 = 10$
5: Calculate the value of angle $a$ 	15: Leah, Mikhail and Naureen share money in the ratio 3:5:7. If they share £210 in total, work out how much Mikhail gets.
6: Simplify $4k^3 - 3k^2 + 5k$	16: For an object travelling at a fixed speed, the distance it travels is proportional to the time taken. When the object travels for 5 seconds, it goes 2 metres. Work out how long it takes to go 1 metre.
7: In a bag there are red, blue and green counters. There are twice as many blue counters as red. Altogether the total of blue and red is twice the total of green. Work out the probability of red.	17: Draw the plan of this shape 
8: A square and rectangle have the same area. If the perimeter of the square is 32 cm, work out the sum of the length and width of the rectangle.	18: Write down the nth term of this sequence 15, 11, 7, 3, ...
9: A parallelogram has vertices at (3, 4), (3, 5) and (4, 5). Give the two possible coordinates of the fourth vertex.	19: Predict the number of hours needed to revise to get a grade C. 
10: Estimate the calculation $\frac{6.4 + 106.4}{6.4}$	20: $11 \times 11$