










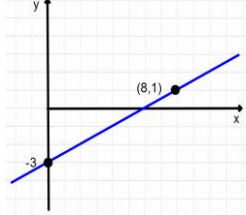







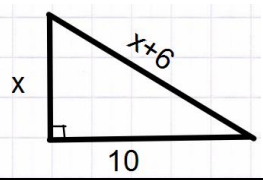










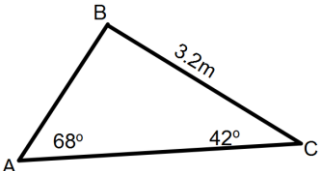










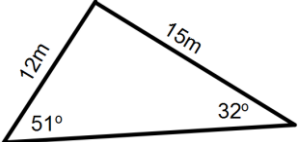



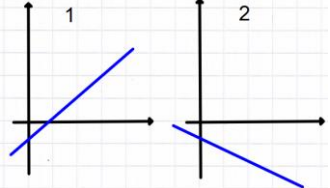

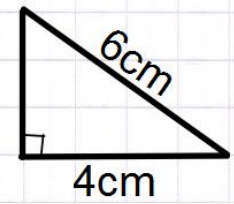






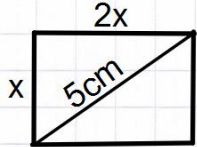








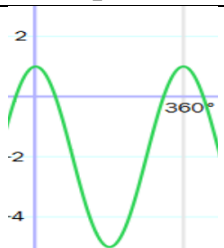




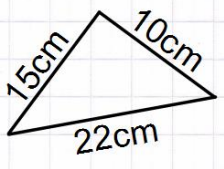


1	Evaluate $5\frac{3}{5} - 2\frac{2}{3}$			2
2	Find the equation of the straight line passing through the points A(-2,7) and B(14,-1)			3
3	Simplify $s^{-3} \times s^7$			1
4	Change the subject of the formula to d: $R = \frac{\sqrt{3y+d}}{4}$			4
5	Solve $3\cos x = 2$ (for $0 \leq x \leq 360$)			3
6	What is the area of an equilateral triangle with a side of 15cm? Round to 3sf			3
7	Factorise fully $12w^2 - 27$			2
8	Helen buys a car for £12000, it is estimated that it will decrease in value by 8% each year. What will be its value in 5 years? Round to 2 sf			3
9	Is a triangle with sides 36cm, 24cm and 43cm right angled?			3
10	Find the roots of the equation $y = x^2 - 4x - 45$			3


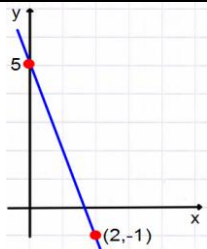



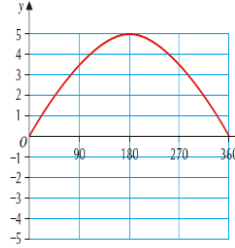




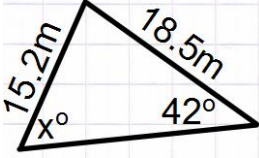


1	Evaluate $103.4 - 4.2 \times 40$			2
2	Find the equation of the straight line. 			3
3	Simplify $\frac{\sqrt{48}}{\sqrt{75}}$			2
4	Change the subject of the formula to t: $m = \frac{5t^3}{d}$			3
5	Solve $4\cos x^\circ - 3 = -2$ (for $0 \leq x \leq 360$)			3
6	Solve the equation to 2dp $4x^2 - 12x + 4 = 0$			3
7	Factorise fully: $3x^2 + 6x - 24$			2
8	A TV costs £384 in a 40% off sale, what is its ordinary price?			2
9	Find the value of x: 			3
10	Find the roots of the equation: $y = 3x^2 - 8x + 4$			3










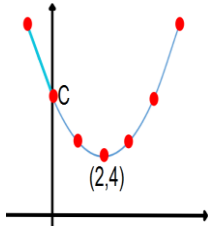

1	Evaluate $5\frac{3}{5} \div \frac{4}{7}$			3
2	Find the equation of the straight line through $(-2, -10)$ parallel to $y - 3x = -4$			3
3	Remove brackets and simplify $b^{\frac{3}{4}} \left[b^{\frac{1}{4}} - 4 \right]$			2
4	Solve $2x - 4(x + 2) = 16$			3
5	Sketch the graph $y = 3\sin(4x^\circ)$ for $0 \leq x \leq 360$			3
6	Find the volume of a cone with a radius of 8.3cm and a height of 11.2cm. Give your answer to 2sf			3
7	Remove the brackets and simplify $(3x - 2)^2 - 4(x^2 - 3)$			3
8	A house costing £185,000 is estimated to rise in value by 3.2% each year. What will its value be in 5 years?			4
9	Find the length of AC 			3
10	Describe the nature of the roots of $y = 6x^2 - 3x + 3$			3





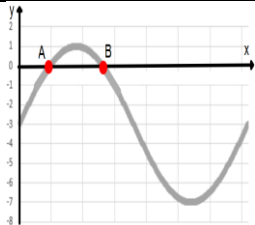




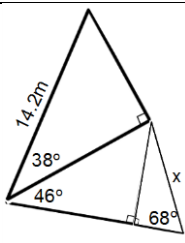


1	Evaluate $\frac{4.3+3.2 \times 4}{3^2}$			3
2	What is the equation of the line passing through (-4,6) which is parallel to the line $4x + 2y - 8 = 0$?			3
3	Simplify $\sqrt{48} - 2\sqrt{3}$			2
4	Expand and simplify $(3x + 2)(x^2 - x + 6)$			3
5	Sketch the graph $y = 3\cos(2x^\circ)$ For $0 \leq x \leq 360$			3
6	Solve $4x^2 - 6x - 3 = 0$ Giving your answer to 2dp			3
7	Factorise $5x^2 + 7x - 6$			2
8	There is a 30% off sale at Next. The sale price of a jacket is £45.50. What is its pre-sale price?			2
9	Find the area 			3
10	Sketch the graph $y = (x + 4)(x - 2)$ Label the intercepts and turning point			3









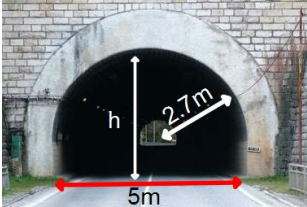

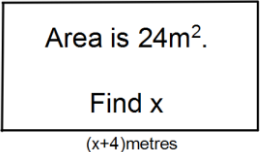

1	<p>If $f(x) = x^3 - 2x$, find $f(-3)$</p>			2
2	 <p>A - $y=3x+4$ B - $y=2x-1$ C - $y=-2x+3$ D - $y=-\frac{1}{2}x-2$</p> <p>Match the graph and equations</p>			2
3	<p>Find the missing length, leave your answer as a surd.</p> 			3
4	<p>Solve $3x - 18 \geq 4(x + 2)$</p>			3
5	<p>Solve $5\cos x^\circ + 4 = 2$ for $0 \leq x \leq 360$</p>			3
6	<p>Calculate the standard deviation for: Set 1 - 4,16,8,12 Set 2 - 6,3,5,10 Give 2 statements comparing the results.</p>			6
7	<p>Expand $(4x - 2)(2x^2 - 3x + 1)$</p>			3
8	<p>A new Peugeot 207 costing £18000 will drop in value by 18% each year. What will its value be in 5 years?</p>			3
9	<p>Find the exact value of x</p> 			3
10	<p>What are the nature of the roots of: $3x^2 - 4x + 6 = 0$</p>			3

1	Find $\frac{3}{4} \left[2\frac{2}{5} - \frac{5}{7} \right]$			3
2	A straight line with the gradient -3 passes through (-1,7) and (4,a). Find the value of a.			3
3	Expand $2r^3 \left[3r - 2r^{-5} + r^{\frac{1}{3}} \right]$			2
4	Change the subject of the formula to b: $s = 3 \left[\frac{b^2}{4} - 5p \right]$			4
5	This is the graph $y = a \cos x + b$ Find the values of a and b 			2
6	How many conical glasses with radius 5cm and height 12cm can be filled from a 2litre bottle of Cola?			3
7	Factorise fully: $8x^2 + 12x - 36$			2
8	A restaurant bill of £64.96 included a 12% service charge. What was the bill before the charge was added?			2
9	Find the size of the largest angle 			3
10	Sketch $y = (2x + 4)(x - 3)$ labelling intercepts and turning point			3

1	<p>Calculate $2\frac{2}{3} + \frac{3}{4}$ to 2 decimal places</p>			3
2	<p>Find the equation of the line</p> 			3
3	<p>Find $64^{\frac{2}{3}}$</p>			2
4	<p>Solve $2(x - 3) = \frac{x+4}{3}$</p>			4
5	<p>This is the graph $y = a \sin(bx^\circ)$ Find the values of a and b</p> 			2
6	<p>Demi, Jade and Jodi share out a tub of Quality Street chocolates. The mean number of sweets they get is 15 and the standard deviation is 4 sweets. If each of the friends is given 10 more what is the new mean and standard deviation?</p>			2
7	<p>Multiply out and simplify $4(2x^2 - 3x + 5) - 3x(x + 1)^2$</p>			4
8	<p>The volume of a sphere is 524cm^3. What is its radius to the nearest cm?</p>			3
9	<p>Find x°</p> 			3
10	<p>Write down the axis of symmetry and turning point of $y = (x + 3)^2 - 4$</p>			2

1	Calculate 45% of £36.20			2
2	A straight line is given by $y=mx+c$. Sketch this to illustrate a possible graph when $m<0$ and $c>0$			2
3	Simplify $\frac{(ab)^2}{a^3b^4}$			2
4	Write $\frac{4}{a} - \frac{3}{a+2}$ as a single fraction			3
5	Solve $5\cos x^\circ = \cos x^\circ - 3$ for $0 \leq x \leq 360$			3
6	Solve $4x^2 - 3x = 6$ To 2 decimal places			3
7	Factorise fully $20x^2 - 45y^2$			2
8	Jodi bought a large bottle of ketchup (376g) has 17.5% more than a standard jar. What is the size of a standard bottle?			2
9	Plot the point (5,-4) on a coordinate diagram. How far is it from the origin? (Round to 2sf)			4
10	This is the graph of $y=(x+a)^2+b$ what is the value of C 			3

1	Find the mean of $\frac{2}{3}, \frac{1}{2}, \frac{1}{4}, \frac{3}{8}$			3
2	Find the gradient and y intercept for the line $4x - 2y = 6$			2
3	Express $\frac{4}{\sqrt{6}}$ with a rational denominator in its simplest form			3
4	Change the subject of the formula to m: $L = \frac{m^2}{3} - 4$			3
5	The graph shown is $y=4\sin x-3$. Find the values of A and B 			3
6	Draw a box plot for: 18,12,15,21,16,14,15,18,15,19			3
7	Factorise fully $6p^2 + 15p - 36$			2
8	A plant on Monday is 15.2cm tall, each day it grows 4.2%. How tall will it be in 6 days? Round to 3sf.			3
9	Find the value of x to 1dp 			4
10	Describe the roots of $y = 4x^2 - 3x$			3

1	<p>Jade is baking biscuits for a party. Each batch of 24 uses $\frac{3}{7}$ block of butter. If she has 4 blocks of butter how many biscuits can she make?</p>			3
2	<p>Find the equation of the straight line between $(-3,24)$ $(8,-20)$</p>			3
3	<p>Express in the simplest form $\sqrt{t}(t^4)^3$</p>			3
4	<p>Solve $\frac{2(2x+3)}{5} = \frac{x+1}{2}$</p>			4
5	<p>Solve $\cos^2x = \frac{4}{9}$ for $0 \leq x \leq 360$</p>			3
6	<p>A cone with a radius of 6cm has a volume of 301.6cm^3. What is its height?</p>			3
7	<p>Multiply out and simplify: $(x - 3)^3$</p>			3
8	<p>Heather bought a TV for £329, the price included 17.5% VAT. How much did it cost before VAT was added?</p>			2
9	<p>What is the height of the tunnel?</p> 			
10	<p>Area is 24m^2. Find x</p> 			

Summary:

Keep a record of the questions that you get right. Use this to identify areas where you are struggling a bit. Get help with these areas!

10. Quadratics (Solving, Graphs)										
9. Triangle Rules (Pythagoras, Sine Rule, Cosine Rule, Area of Triangle)										
8. Percentages (Compound interest, appreciation, depreciation, working backwards)										
7. Factorisation and multiplying out brackets										
6. Using formulae (standard deviation, quadratic formula, volumes)										
5. Trigonometric graphs and equations										
4. Algebra (changing the subject of a formula, solving equations and inequations)										
3. Surds and indices										
2. Equation of a straight line										
1. Basic calculations (BODMAS, fractions, decimals)										
	Homework 1	Homework 2	Homework 3	Homework 4	Homework 5	Homework 6	Homework 7	Homework 8	Homework 9	Homework 10