



Year 9 – Autumn term learning program

Depending on your current level of maths some students may need to review year 7 and 8 lessons first.

More able students should complete additional lessons within each topic to extend themselves.

The first part of the autumn term is dedicated to revise and improve the core topics from year 7 and 8.

Lesson Number	Revise and improve	Complete	Score
	Subject - Number, Ratio and proportion		
	Topic - Long addition and subtraction		
1	Long addition		
2	Long subtraction		
	Topic - Long Multiplication and Division		
3	Long multiplication part 1		
4	Long multiplication part 2		
5	Long multiplication part 3		
6	Long multiplication using the grid method		
7	Long multiplication of decimals		
8	Multiplying decimal numbers using the grid method		
9	Long division		
10	Long division with decimal answers		
	Topic - Negative Numbers		
16	Adding negative numbers		
17	Subtracting negative numbers		
18	Adding and subtracting negative numbers		
19	Multiplying negative numbers		
20	Dividing negative numbers		
21	Negative or subtract		
	Topic - Fractions		
56	Simplifying fractions		
57	Adding fractions, part 1		
58	Adding fractions, part 2		
59	Adding fractions, part 3		
60	Subtracting fractions, part 1		
61	Subtracting fractions, part 2		
64	Equivalent fractions, part 1		
66	Finding a fraction of an amount		
67	Ordering fractions		
	Topic - Mixed Numbers		
68	Simplifying top heavy fractions into mixed numbers		

69	Changing mixed numbers into top heavy fractions		
70	Top heavy fractions into mixed numbers, exam tip		
	Topic - Percentages		
79	Finding percentages - non calculator, part 1		
80	Finding percentages - non calculator, part 2		
82	Finding percentages using a calculator		
83	Increasing a number by a percentage (non-calculator)		
84	Increasing a number by a percentage (calculator)		
85	Decreasing a number by a percentage (non-calculator)		
86	Decreasing a number by a percentage (calculator)		
87	Writing a number as a percentage of another number		
	Subject - Algebra		
	Topic - Introduction to Algebra		
1	Introduction to Basic Algebra Part 1		
2	Introduction to Basic Algebra Part 2		
	Topic - Simplifying Expressions		
3	Simplifying Expressions Part 1		
4	Simplifying Expressions Part 2		
5	Simplifying Expressions Part 3		
	Topic - Substituting Numbers into Formula		
25	Substituting numbers into formula, part 1		
26	Substituting numbers into formula, part 2		
27	Substituting numbers into formula, part 3		
	Topic - Factorising into Single Brackets		
22	Factorising expressions into single brackets part 1		
23	Factorising expressions into single brackets part 2		
	Topic - Solving Equations		
50	Solving equations, part 1		
51	Solving equations, part 2		
52	Solving equations, part 3		
53	Solving equations with brackets		
54	Solving equations with a divide or fraction		
55	Solving equations with x's on both sides		
	Topic - Solving Equations Using Number Machines (Easier method)		
56	Solving equations, using number machines		
57	Solving equations with brackets, using number machines		
58	Solving equations with a divide in, using a number machine		
59	Solving equations with x's on both sides using number machines		
	Subject - Number, Ratio and proportion		
	Topic - Ratio		
99	Introduction to Ratios		
100	Simplifying ratios		
102	Sharing amounts into ratios, part 1		
103	Sharing amounts into ratios, part 2		
104	Sharing amounts into ratios, part 3		

105	Ratio questions with ingredients		
	Topic - Exchange Rates		
109	Exchange rates		
	Topic - Best Buy		
110	Best buy - Calculator method		
End of revise and improve			
	Subject - Algebra		
	Topic - Straight Line Graphs		
81	Introduction to straight line graphs		
82	Exam tip - completing a table of values		
83	Rearranging equations in the form of $y=mx+c$		
84	Plotting straight line graphs from a table of values		
85	Plotting straight line graphs of $x=$ number and $y=$ number		
86	Finding the gradient of a line		
87	Finding the y intercept		
	Topic - Quadratic Graphs (Higher Only)		
135	Quadratic graphs, making a table of values		
136	Plotting quadratic graphs and finding the minimum value		
	Topic - Rearranging Formula		
28	Rearranging formula part 1		
29	Rearranging formula part 2		
30	Rearranging formula Higher only		
31	Rearranging formula when the subject is on the bottom of a divide line (Higher Only)		
	Topic - Rearranging Formula when the Subject Appears Twice (Higher Only)		
32	Rearranging Formula when the Subject Appears Twice Part 1		
33	Rearranging Formula when the Subject Appears Twice Part 2		
	Topic - Direct Proportion		
75	Direct Proportion m is proportional to p		
76	Direct Proportion y is proportional to x^2		
77	Using Formula Triangles in Direct Proportion Questions		
	Topic - Inverse Proportion		
78	Inverse Proportion y is Inversely Proportional to x		
79	Inverse Proportion y is Inversely Proportional to x^2		
80	Using Formula Triangles in Inverse Proportion Questions		
	Topic - Simultaneous Equations		
149	Solving simultaneous equations graphically		