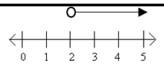
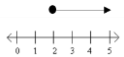
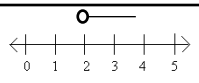
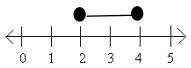
Year 9 – Maths – Spring 2

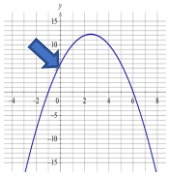
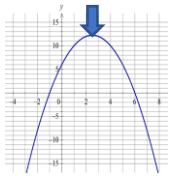
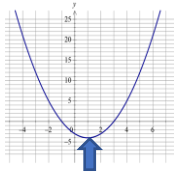
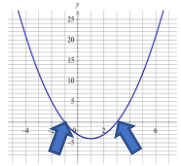
Unit 12 - equations

No.	Question	Answer	Example
12.1	What does solve mean?	Find the unknown	Solve to find x: $2x + 1 = 5$ $2x = 4$ $x = 2$
12.2	What is the unknown?	The letter in an equation	$2x + 1 = 5$ x *is the unknown*
12.3	What does expand mean?	Multiply out the bracket in the expression	$2(x + 5) = 2x + 10$
12.4	What does rearrange mean?	Make another letter the subject of the equation	Make x the subject $2x + y = z$ $2x = z - y$ $x = \frac{z - y}{2}$
12.5	What is the subject?	The letter of the equation which is on its own on one side	$x = \frac{z - y}{2}$ x *is the subject*
12.6	What is a linear equation?	An equation which forms a straight line on a graph	$2x + 5 = y$
12.7	What is a quadratic equation?	An equation containing a power which forms a curved line on a graph	$2x^2 + 5 = y$
12.8	>	Greater than	
12.9	<	Less than	
12.10	$x > 2$	x is greater than 2	
12.11	$x \geq 2$	x is greater than or equal to 2	
12.12	$x < 2$	x is less than 2	
12.13	$x \leq 2$	x is less than or equal to 2	
12.14	$2 < b < 4$	b is greater than 2 and smaller than 4	
12.15	$2 \leq b \leq 4$	b is greater than or equal to 2 and smaller than or equal to 4	

Unit 13 – simultaneous equations

No.	Question	Answer	Example
13.1	What are simultaneous equations?	A pair of equations that have the same solutions for the unknown	$x + y = 10$ $2x + y = 14$

Unit 14 – quadratic graphs

No.	Question	Answer	Example
14.1	What is the y intercept?	Where the graph crosses the y axis	
14.2	What is the maximum point?	The point of the graph where the gradient = 0 and changes from positive to negative	
14.3	What is the minimum point?	The point of the graph where the gradient = 0 and changes from negative to positive	
14.4	What are the roots?	Where the graph crosses the x axis (the solutions)	

Date (week commencing)	Numbers to learn
28th Feb	12.1 – 12.10
7th Mar	12.6 – 12.15
14th Mar	12.1 – 13.1
21st Mar	12.1 – 13.1
28th Mar	14.1 – 14.4
4th Apr	12.1 – 14.4