

Maths Workout - Algebra & Problem Solving

Topic 18 - Straight Lines 2				
Target 1	Target 2	Target 3	Target 4	Target 5
<i>Calculate the equation of a straight line</i>	<i>Rearrange an equation to the form $y=mx+c$ to find the gradient and intercept</i>	<i>Find the midpoint between 2 points the length of a line segment</i>	<i>Calculate the length of a line segment</i>	<i>Solve problems with parallel and perpendicular lines</i>
1. Demo: Calculate the equation of a straight line given 1 point and the gradient	1. Demo: Rearrange an equation to the form $y=mx+c$ to find the gradient and y-intercept	1. Demo: Find the midpoint between 2 points	1. Demo: Find the length of a line segment	1. Demo: Find the equation of a line which is parallel to another
2. Calculate the equation of a straight line given 1 point and the gradient (integer gradient)	2. Rearrange an equation to the form $y=mx+c$ to find the gradient and y-intercept (y positive)	2. Find the midpoint between 2 points.	2. Find the length of a line segment	2. Find the equation of a line which is parallel to another
3. Calculate the equation of a straight line given 1 point and the gradient (fractional gradient)	3. Rearrange an equation to the form $y=mx+c$ to find the gradient and y-intercept	3. Find the midpoint between 2 points.	3. Find the length of a line segment	3. Demo: Find the equation of a line which is perpendicular to another using $m_1m_2 = -1$
4. Demo: Calculate the equation of a straight line given 2 points		4. Solve a problem with midpoint	4. Solve a problem with the length of a line segment	4. Speed response: Identify a gradient and its corresponding perpendicular gradient
5. Calculate the equation of a straight line given 2 points (integer gradient)				5. Find the equation of a line which is perpendicular to another
6. Calculate the equation of a straight line given 2 points (fractional gradient)				
7. Calculate the equation of any straight line from a graph				