




## Assess your learning - The Line

Where is your learning at? <b>Be Honest!</b>	 red	 orange	 green	Revised for 10 Week	Revised for Summer
<b>Can you answer the following questions?</b>					
I can use the midpoint, distance, slope and equation of a line formulae. E.g. $A(-2,4)$ and $B(3,-2)$ are two points. Find i) the midpoint of $AB$ ii) $ AB $					
I can check if a point is on a line or not. E.g. Check if the point $(2,-3)$ is on the line $2x - 4y + 7 = 0$ or not.					
I can sketch/graph lines when given the equation. E.g. Sketch the line $2x - 3y + 5 = 0$					
I can find the equation of a line parallel/perpendicular to another line. E.g. Find the eqn of the line perpendicular to the line $2x + 5y - 3 = 0$ , which passes through the point $(-1,6)$					
I can use the formula for internal division to find a point that divides a line segment up into a certain ratio. E.g. $C(-3,5)$ and $D(7,-6)$ are two points. Find coordinates of the point $E$ , where $E$ is on $[CD]$ such that $ CE : DE  = 2:3$ .					
I can find the area of a triangle when given three points, when one of them is $(0,0)$ . E.g. Find the area of a triangle with vertices $(0,0)$ , $(2,-5)$ and $(6,-2)$ .					
I can find the area of a triangle, when given three points, when none of them are $(0,0)$ . E.g. Find the area of a triangle with vertices $(3,2)$ , $(6,-3)$ and $(-4,5)$ .					
I can find the perpendicular distance from a point to a line. E.g. Find the perpendicular distance from the point $(-2,5)$ to the line $3x - 2y + 7 = 0$					
I can find the shortest distance between two parallel lines. E.g. Find the shortest distance between the two parallel lines $2x - 3y + 4 = 0$ and $2x - 3y - 8 = 0$					
I can find the equation of a line that is at a certain perpendicular distance to another line. E.g. Find the equation of the two lines that are parallel to the line $x - 3y + 4 = 0$ and a distance of $\sqrt{5}$ from it.					
I can find the angle between two lines, given their equations. E.g. Find the angle between the lines $3x - 4y + 8 = 0$ and $2x + 5y - 3 = 0$					
I can find the equation of a line that is at a certain given angle to another line. E.g. Find the equations of the two lines through the point $(-2,3)$ that make an angle of $45^\circ$ with the line $12x + 2y - 3 = 0$ .					