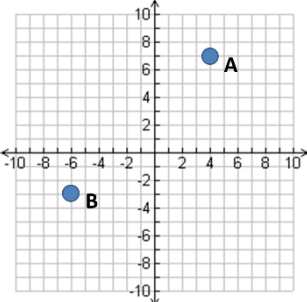
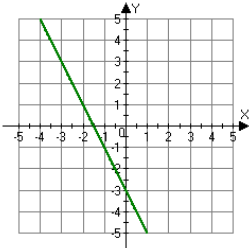
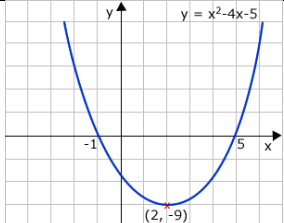
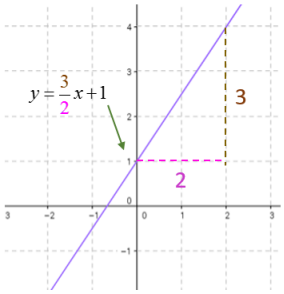
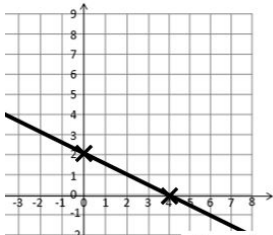


Topic/Skill	Definition/Tips	Example																
1. Coordinates	Written in pairs . The first term is the x-coordinate (movement across). The second term is the y-coordinate (movement up or down)	 <p>A: (4,7) B: (-6,-3)</p>																
2. Linear Graph	Straight line graph. The equation of a linear graph can contain an x-term , a y-term and a number .	<p>Example:</p>  <p>Other examples: $x = y$ $y = 4$ $x = -2$ $y = 2x - 7$ $y + x = 10$ $2y - 4x = 12$</p>																
3. Quadratic Graph	A ' U-shaped ' curve called a parabola . The equation is of the form $y = ax^2 + bx + c$, where a, b and c are numbers, $a \neq 0$. If $a < 0$, the parabola is upside down .	 <p>$y = x^2 - 4x - 5$</p>																
4. Plotting Linear Graphs	<p>Method 1: Table of Values Construct a table of values to calculate coordinates.</p> <p>Method 2: Gradient-Intercept Method (use when the equation is in the form $y = mx + c$)</p> <ol style="list-style-type: none"> 1. Plots the y-intercept 2. Using the gradient, plot a second point. 3. Draw a line through the two points plotted. <p>Method 3: Cover-Up Method (use when the equation is in the form $ax + by = c$)</p> <ol style="list-style-type: none"> 1. Cover the x term and solve the resulting equation. Plot this on the x - axis. 2. Cover the y term and solve the resulting equation. Plot this on the y - axis. 3. Draw a line through the two points plotted. 	<table border="1" data-bbox="979 1093 1437 1200"> <tr> <td>x</td> <td>-3</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>y = x + 3</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> </table>  <p>$y = \frac{3}{2}x + 1$</p>  <p>$2x + 4y = 8$</p>	x	-3	-2	-1	0	1	2	3	y = x + 3	0	1	2	3	4	5	6
x	-3	-2	-1	0	1	2	3											
y = x + 3	0	1	2	3	4	5	6											

5. Gradient

The gradient of a line is how **steep** it is.

$$\text{Gradient} = \frac{\text{Change in } y}{\text{Change in } x} = \frac{\text{Rise}}{\text{Run}}$$

The gradient can be positive (sloping upwards) or negative (sloping downwards)

