
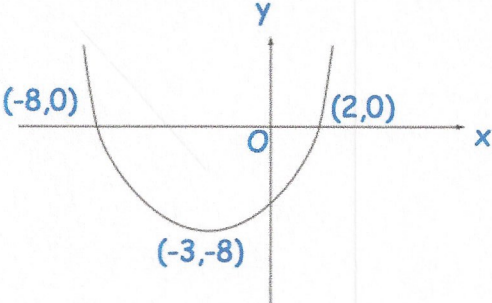
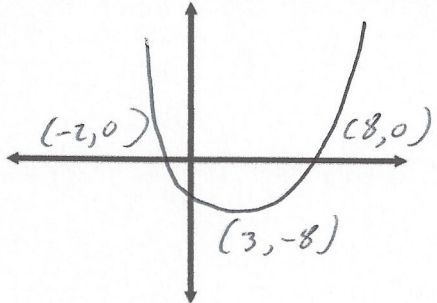
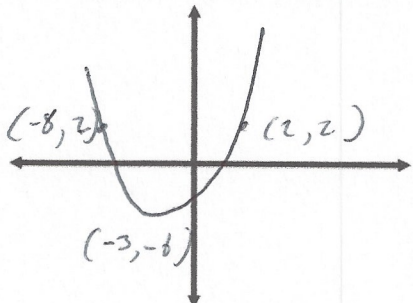


29th December		 Corbettmaths
<p>Show $x^2 - 5x + 3 = 0$ can be rearranged to the form</p> $x = 5 - \frac{3}{x}$ <p>$x^2 = 5x - 3$ $x = 5 - \frac{3}{x}$</p>		
<p>Use the iteration</p> $x_{n+1} = 5 - \frac{3}{x_n}$ <p>to find an approximation solution to $x^2 - 5x + 3 = 0$</p> <p style="text-align: center;">4.303 to 3dp</p>	<p>Start with</p> $x_1 = 1$ $x_2 = 5 - \frac{3}{1} = 2$ $x_3 = 3.5$ $x_4 = 4.1428\dots$ $x_5 = 4.2758\dots$	$x_6 = 4.29\dots$ $x_7 = 4.302\dots$ $x_8 = 4.302\dots$ $x_9 = 4.303\dots$ to 3dp
<p>Shown is a sketch of the graph $y = f(x)$.</p> <p>(a) Sketch $f(-x)$ (b) Sketch $f(x) + 2$</p> <p>Label known coordinates</p>		
		
<p>Make x the subject of</p> $\frac{8}{x} = \frac{3}{y} + \frac{2}{5}$ $\frac{8}{x} = \frac{15}{5y} + \frac{2y}{5y}$ $\frac{8}{x} \times \frac{5y}{5y} = \frac{15 + 2y}{5y}$	$40y = 15x + 2xy$ $40y = (15 + 2y)x$ $x = \frac{40y}{15 + 2y}$	