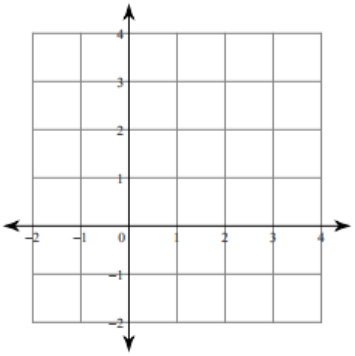
Name_____

Graphing Parabolas from Standard and Vertex Forms

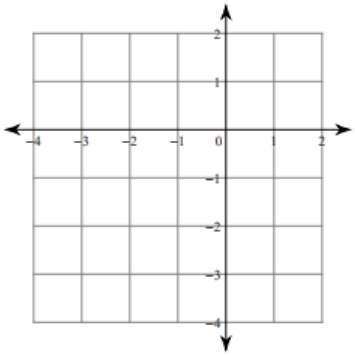
	Vertex Form	**Standard Form**
Vertex	(h, k) x's lie!	$\left(\frac{-b}{2a}, f\left(\frac{-b}{2a}\right)\right)$
Other points (from vertex)	Over 1, up a Over 2, up $4 \cdot a$	Over 1, up a Over 2, up $4 \cdot a$

Sketch the graph of each function. Plot at least 5 Points each.

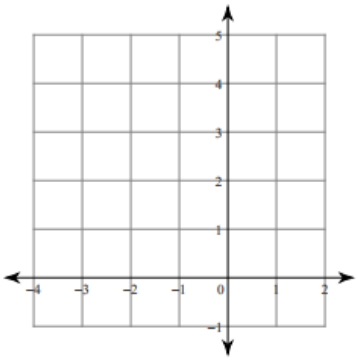
1) $f(x) = x^2 - 2x$



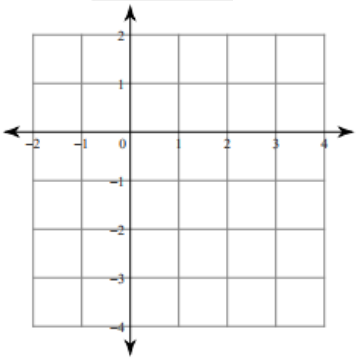
2) $f(x) = (x+1)^2 - 3$



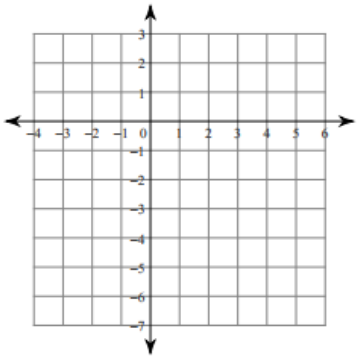
3) $f(x) = -x^2 - 2x + 3$



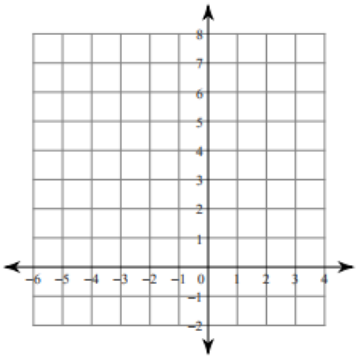
4) $f(x) = -(x-2)^2 + 1$



5) $f(x) = -2(x-1)^2 + 2$



6) $f(x) = 2x^2 + 4x + 1$



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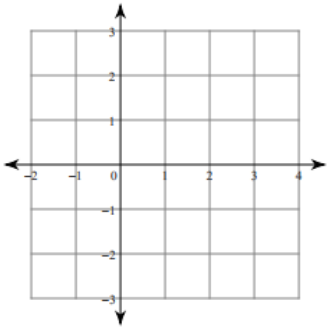
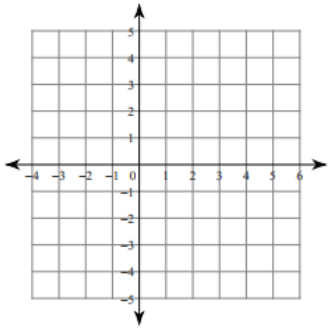
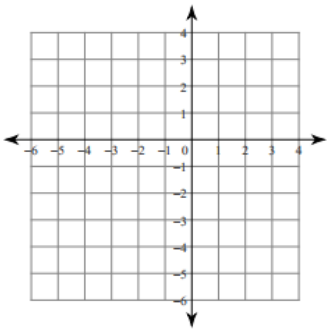
7) $f(x) = -x^2 + 4x - 2$



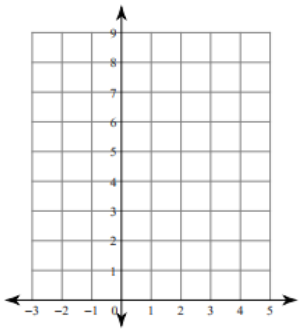
8) $f(x) = 2x^2 - 4x - 2$



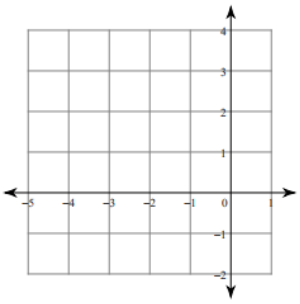
9) $f(x) = -2(x+2)^2 + 3$



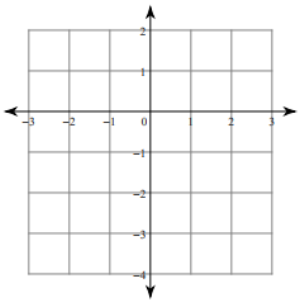
10) $f(x) = x^2 - 2x + 5$



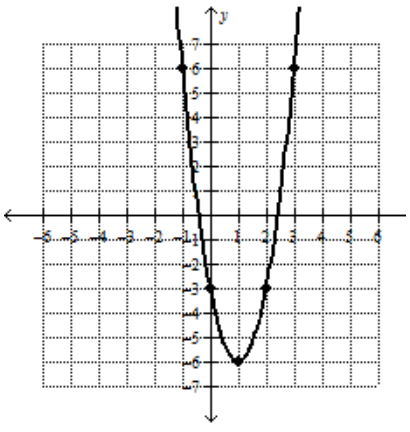
11) $f(x) = x^2 + 4x + 3$



12) $f(x) = -x^2 - 2x$



Write a <u>standard form</u> equation for the following graphs.



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