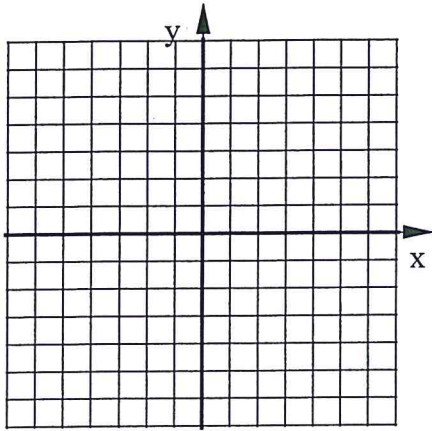
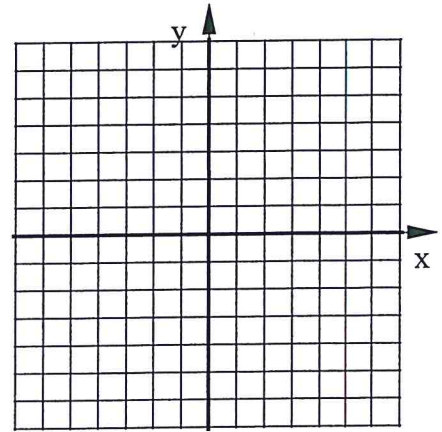


Graph each parabola using at least 5 points. Connect the 5 points with a smooth curve. Put a large dot on the Vertex and label it with its coordinates. Draw the Line of Symmetry as a dashed line. You won't be able to use a graphing calculator for this on a quiz or test so it's to your benefit NOT to use one on this homework.

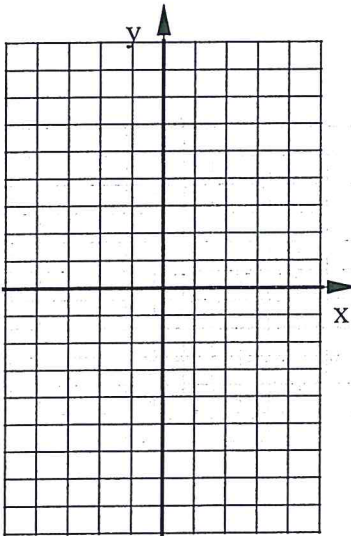
1. $y = 3x^2 - 7$



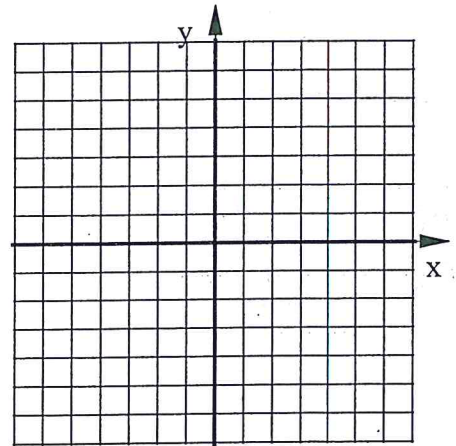
2. $y = -2x^2 + 1$



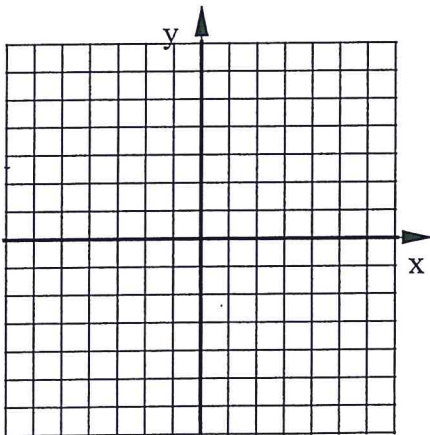
3. $y = -4x^2 + 9$



4. $y = \frac{1}{2}x^2 - 5$



5. Part of the equation for a parabola is $y = 2x^2 \dots$. The Vertex of this parabola is $(-4, -1)$. Plot this Vertex and draw the Line of Symmetry as a dashed line. Then find four other points on the parabola and connect them to finish the graph of this parabola.



6. Is the vertex of each parabola a Max or a Min?

a) $y = 0.205x^2 + 3x - 1$ b) $y = -427x^2 - x + 31$

c) $y = (8 - 3x)(2 + 7x)$ d) $y = -3(x + 2)^2 - 1$