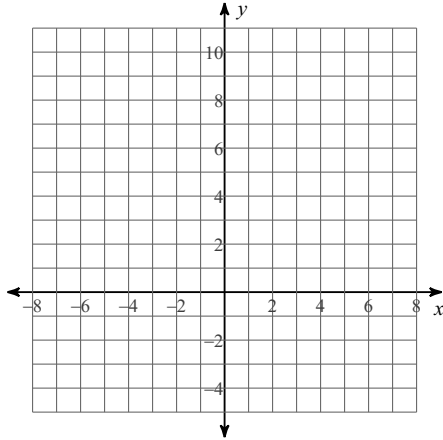


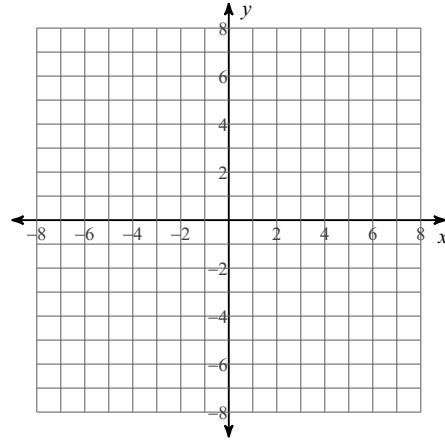
Graphing Quadratics from Vertex Form

Sketch the graph of each function.

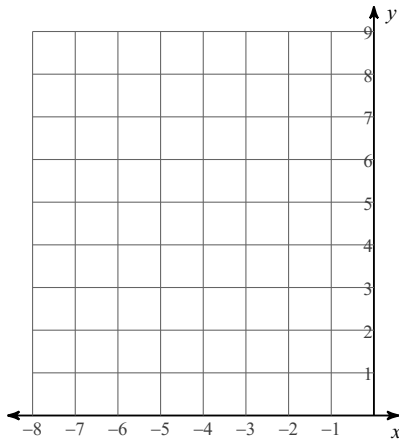
1) $f(x) = (x + 3)^2$



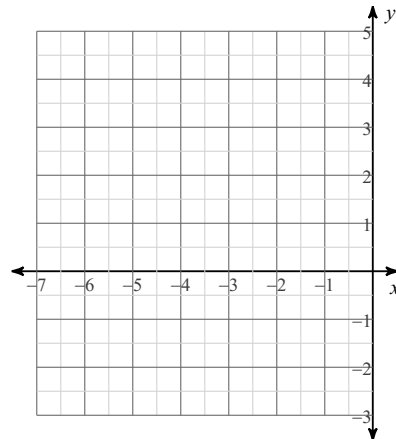
2) $f(x) = x^2 - 3$



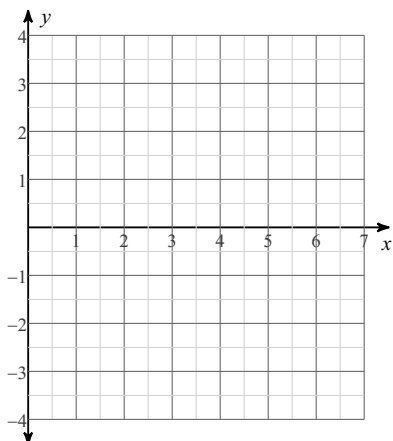
3) $f(x) = (x + 3)^2 + 4$



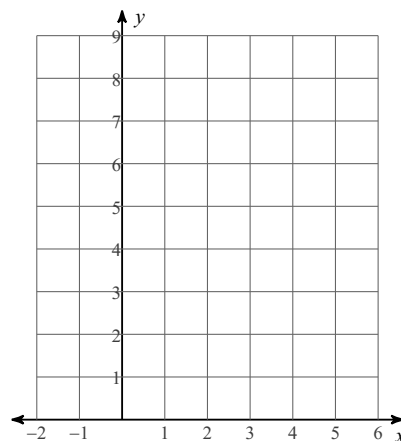
4) $f(x) = (x + 4)^2 - 1$



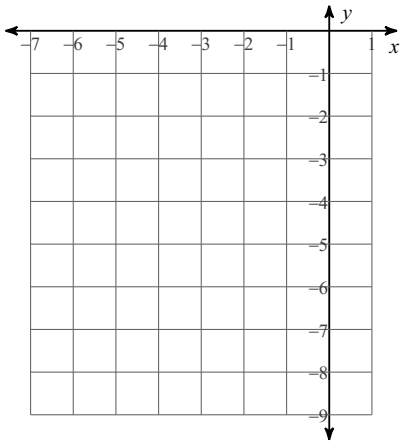
5) $f(x) = (x - 4)^2 - 2$



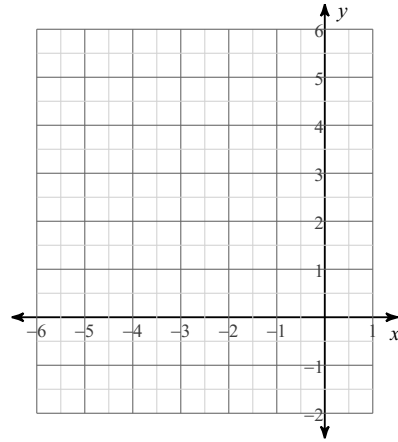
6) $f(x) = (x - 2)^2 + 4$



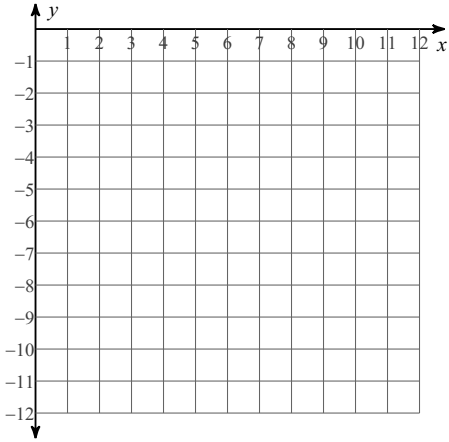
7) $f(x) = -(x + 2)^2 - 4$



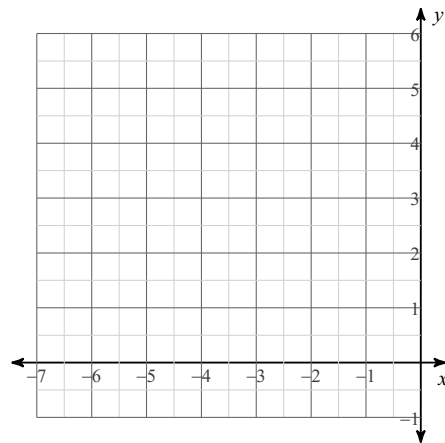
8) $f(x) = \frac{1}{2}(x + 4)^2 + 1$



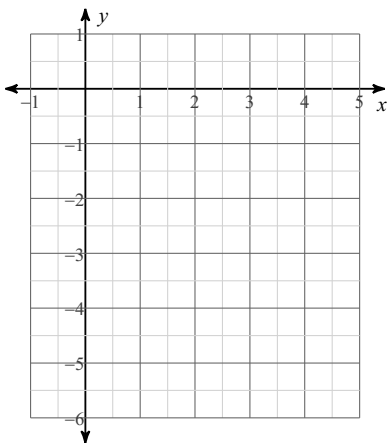
9) $f(x) = -2(x - 2)^2 - 3$



10) $f(x) = \frac{1}{4}(x + 4)^2 + 3$



11) $f(x) = \frac{1}{2}(x - 2)^2 - 4$



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

