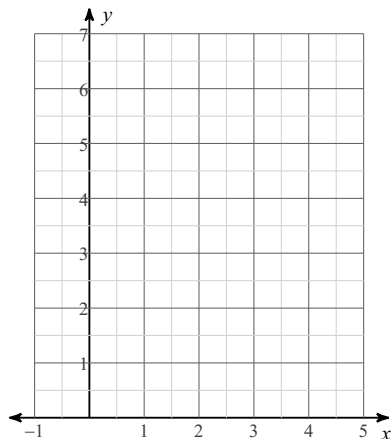


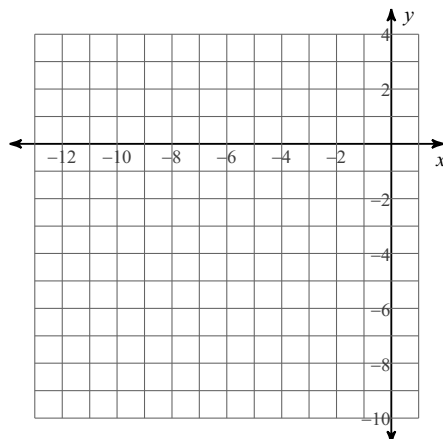
# Algebra 1 Honors Homework

**Sketch the graph of each quadratic that is in vertex form.**

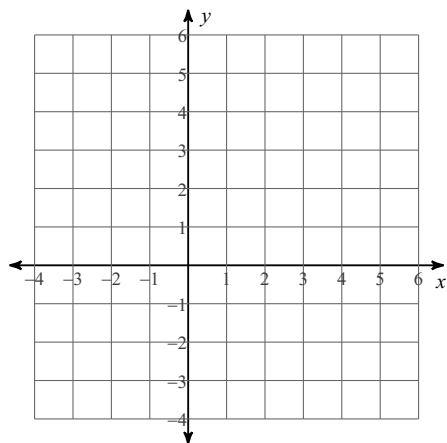
1)  $y = (x - 2)^2 + 2$



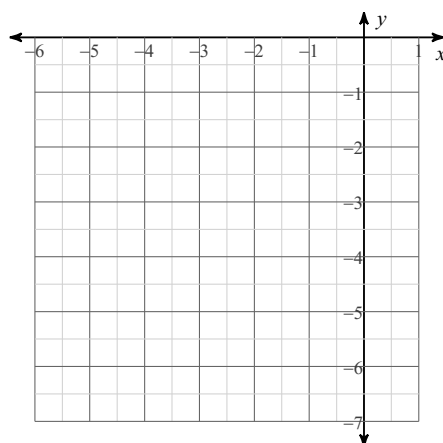
2)  $y = -3(x + 1)^2 + 3$



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



4)  $y = -\frac{1}{2}(x + 4)^2 - 4$



**Solve each equation by completing the square.**

5)  $x^2 - 10x + 21 = 0$

6)  $k^2 + 10k + 11 = -3$

7)  $2x^2 + 8x - 24 = -2$

8)  $3a^2 + 6a - 9 = 0$