

### 5-3 Graphing Quadratics from Standard Form

Period \_\_\_\_\_

**Identify the vertex and axis of symmetry of each.**

1)  $f(x) = -x^2 + 8x - 21$

2)  $f(x) = x^2 + 20x + 97$

3)  $f(x) = x^2 + 4x + 14$

4)  $f(x) = -2x^2 - 32x - 127$

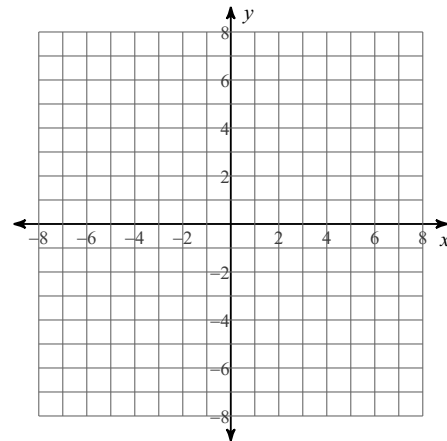
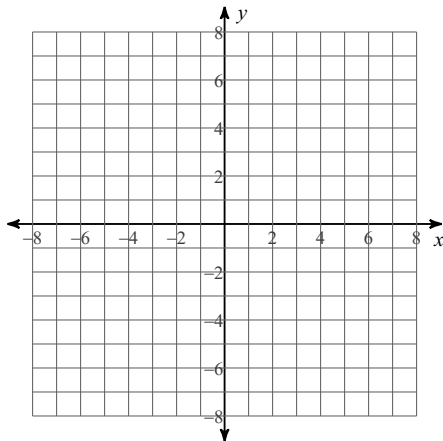
5)  $f(x) = -3x^2 + 1$

6)  $f(x) = -x^2 + 12x - 38$

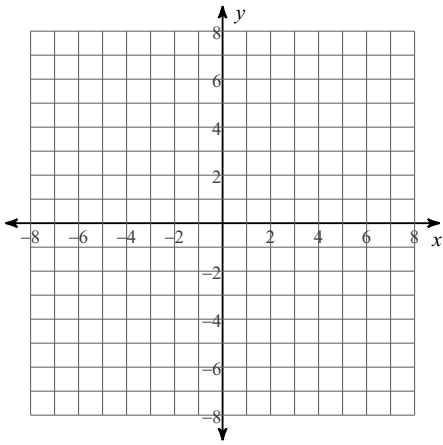
**Identify the x-intercepts and axis of symmetry of each. Then sketch the graph.**

7)  $y = x^2 - 12x + 35$

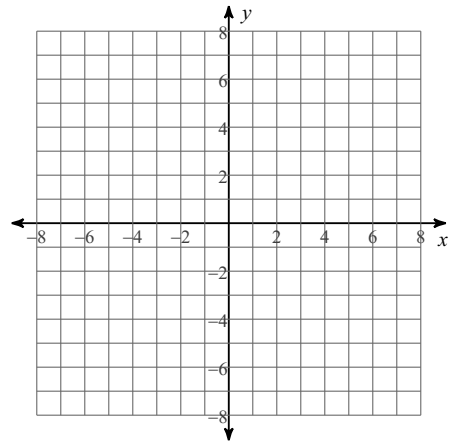
8)  $y = x^2 + x - 6$



9)  $y = -2x^2 - 20x - 50$

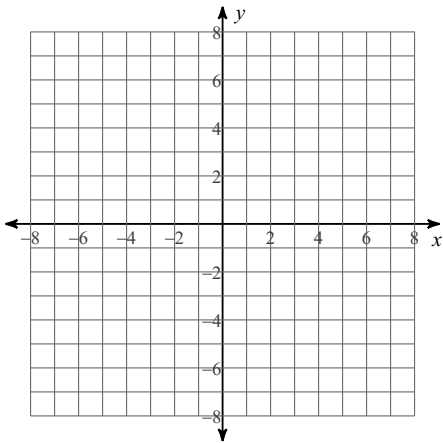


10)  $y = x^2 + 11x + 30$

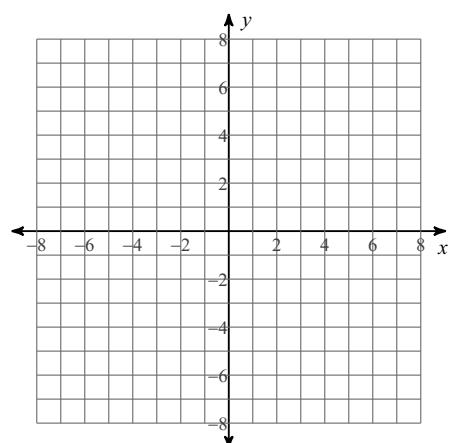


**Identify the vertex, axis of symmetry, and x-intercepts of each. Then sketch the graph.**

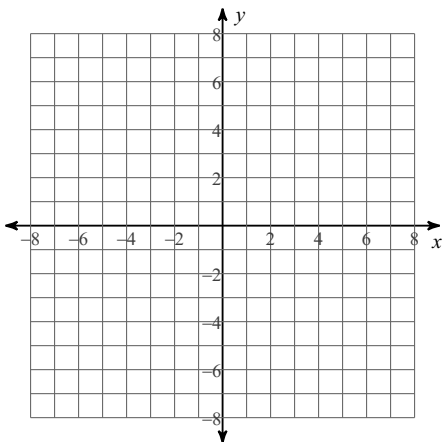
11)  $f(x) = 2x^2 + 16x + 24$



12)  $f(x) = 2x^2 - 6x$



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



14)  $f(x) = -x^2 - 12x - 35$

