

Graphing in Factored Form

Find the x-intercepts by factoring the quadratic expression.

1) $y = x^2 - x$

2) $y = x^2 - 4x + 3$

3) $y = x^2 - 11x + 28$

4) $y = 4x^2 - 16x - 20$

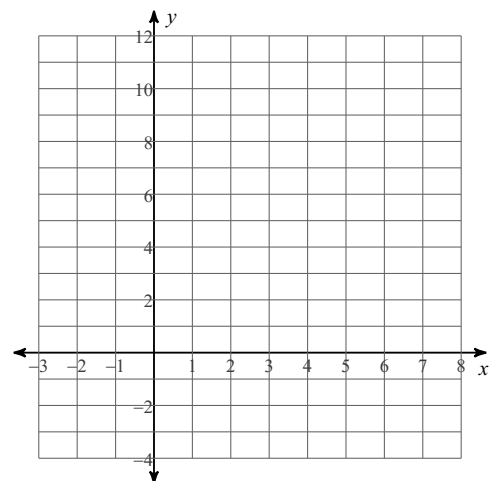
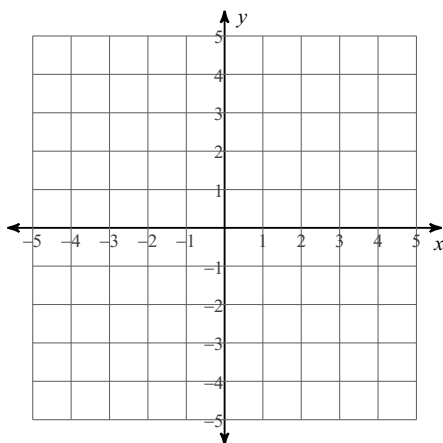
5) $y = 2x^2 + 28x + 96$

6) $y = x^2 - 169$

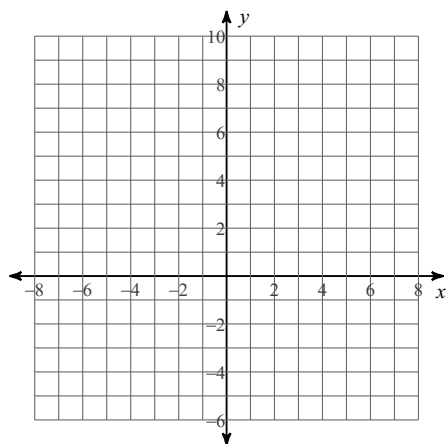
Graph each quadratic equation. List all key features. *Watch the scale of your graph.

7) $y = (x + 2)(x + 0)$

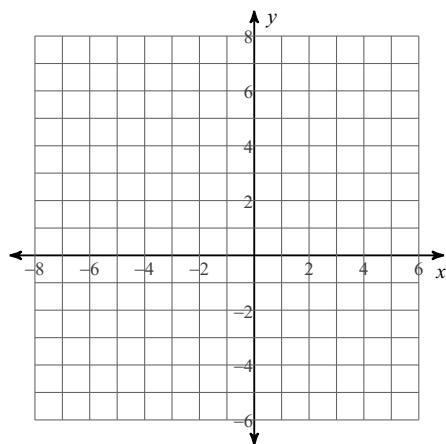
8) $f(x) = 2(x - 3)(x - 5)$



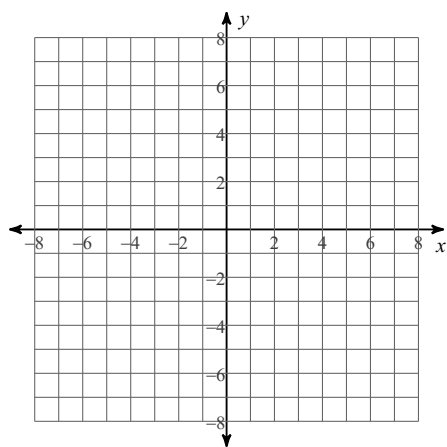
9) $y = -(x - 5)(x + 1)$



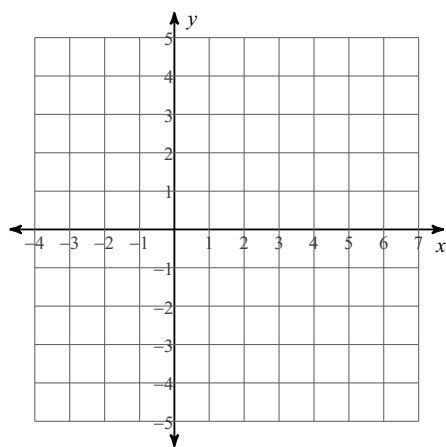
10) $y = (x + 6)(x + 2)$



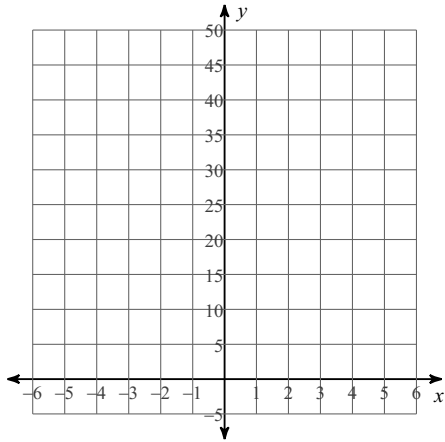
11) $y = -2(x - 3)(x + 1)$



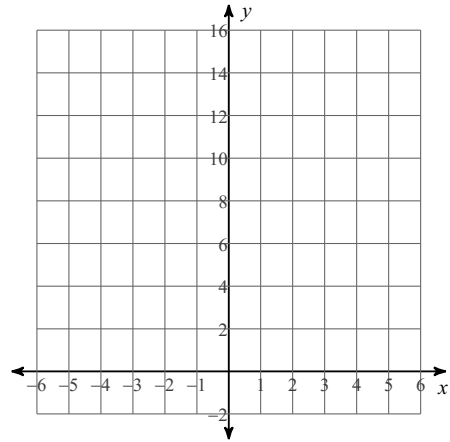
12) $f(x) = (x - 4)(x - 2)$



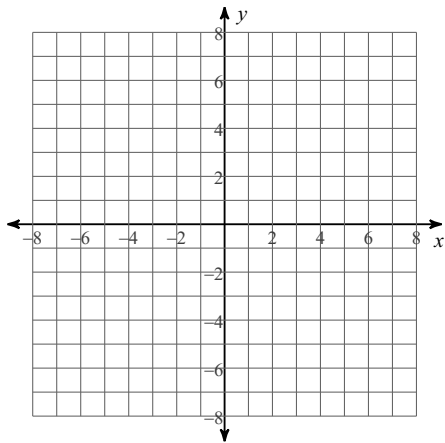
13) $f(x) = -2(x - 5)(x + 5)$



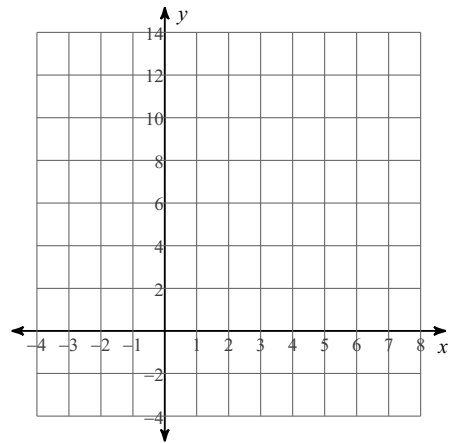
14) $y = -(x - 4)(x + 4)$



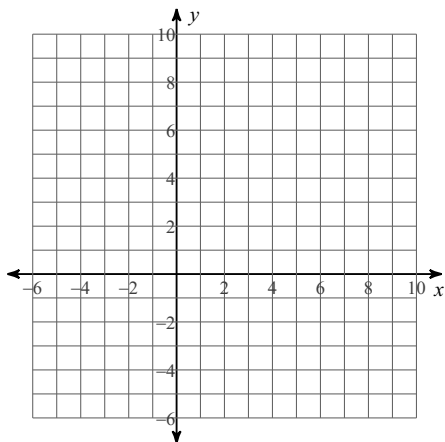
15) $y = -x(x - 4)$



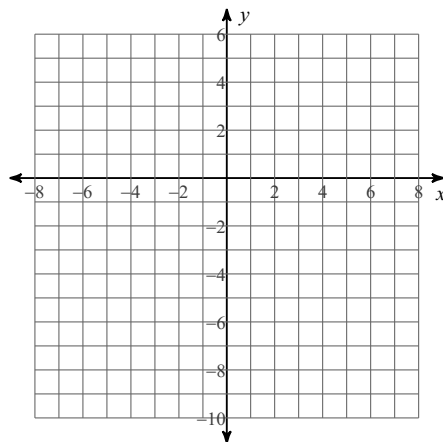
16) $f(x) = 4(x - 1)(x - 3)$



17) $f(x) = -2(x - 9)(x - 5)$

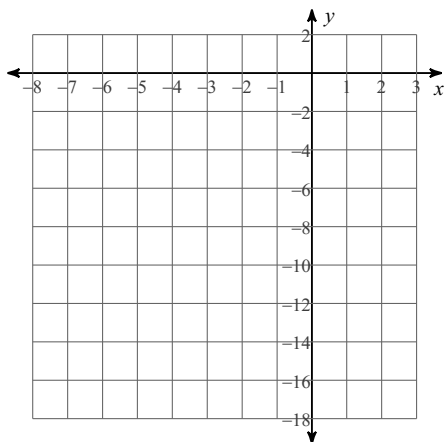


18) $y = (x + 1)(x - 5)$



Factor each equation and then graph the quadratic function. List all key features.

19) $y = x^2 + 6x - 7$



20) $f(x) = x^2 - 7x + 12$

