Name _____ Date _____

## Extra Practice

**In Exercises 1 and 2, find the *x*-intercepts and axis of symmetry of the graph of the function.**
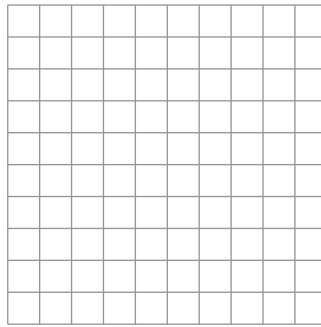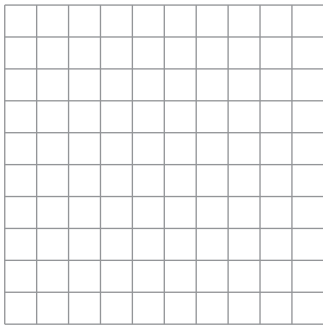
**1.** $y = (x + 2)(x - 4)$

**2.** $y = -3(x - 2)(x - 3)$

**In Exercises 3–6, graph the quadratic function. Label the vertex, axis of symmetry, and *x*-intercepts. Describe the domain and range of the function.**
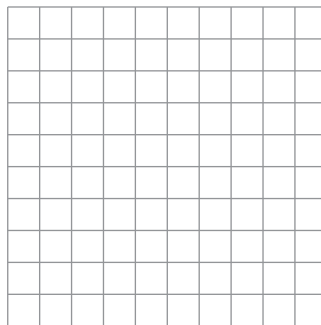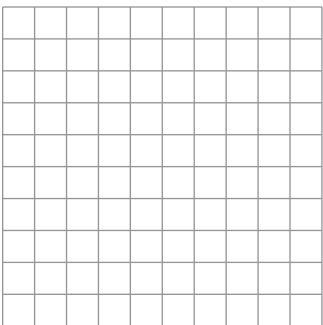
**3.** $m(x) = (x + 5)(x + 1)$

**4.** $y = -4(x - 3)(x - 1)$

**5.** $y = x^2 - 4$

**6.** $f(x) = x^2 + 2x - 15$

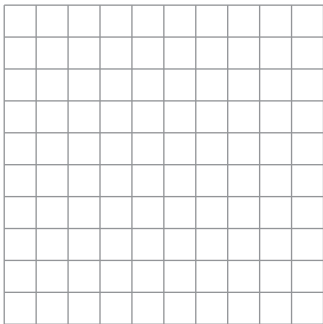## 8.5 Notetaking with Vocabulary (continued)

**In Exercises 7 and 8, find the zero(s) of the function.**
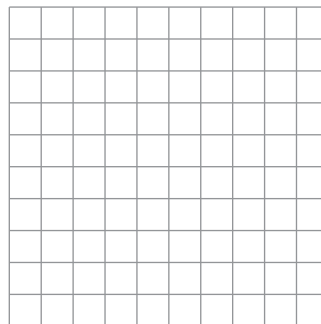
**7.** $y = 6x^2 - 6$

**8.** $y = x^2 + 9x + 20$

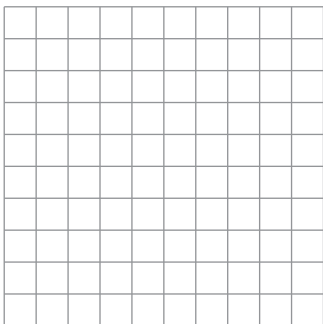**In Exercises 9–12, use zeros to graph the function.**

**9.** $f(x) = x^2 - 3x - 10$

**10.** $f(x) = -2(x + 3)(x - 1)$

**11.** $f(x) = x^3 - 9x$

**12.** $f(x) = 2x^3 - 12x^2 + 10x$