

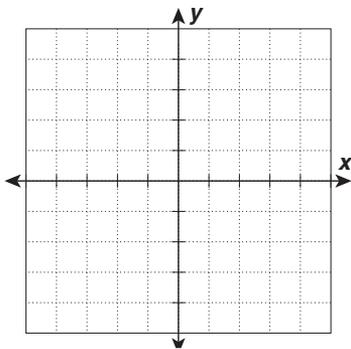
**LESSON** **2-3** **Quadratic Functions**  
**Technology Lab Recording Sheet: Explore Graphs and Factors**

Use with the lesson *Solving Quadratic Equations by Graphing and Factoring*

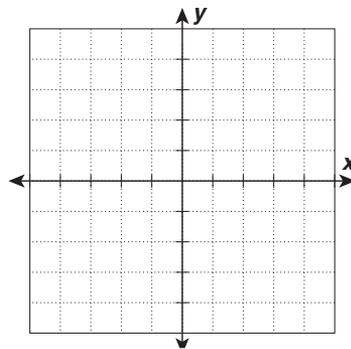
**Try This**

Graph each quadratic function and each of its linear factors. Then identify the  $x$ -intercepts and the axis of symmetry of each parabola.

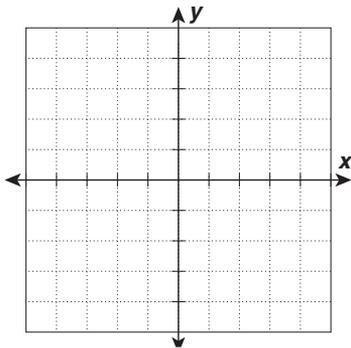
1.  $y = (x - 2)(x - 6)$  \_\_\_\_\_



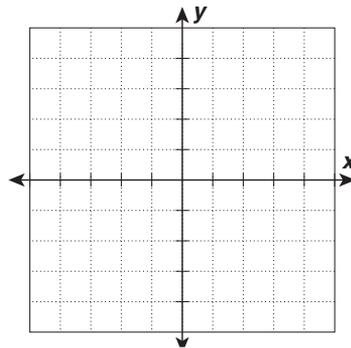
2.  $y = (x + 3)(x - 1)$  \_\_\_\_\_



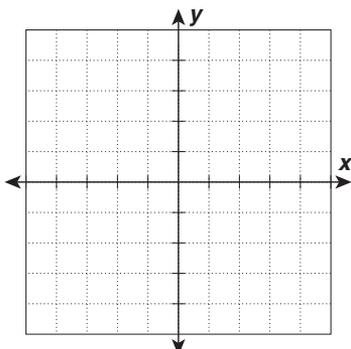
3.  $y = (x - 5)(x + 2)$  \_\_\_\_\_



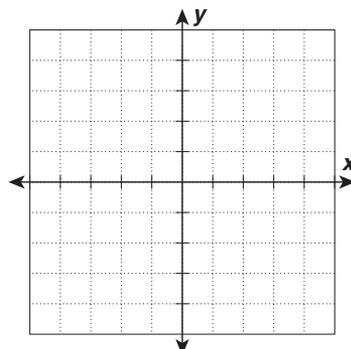
4.  $y = (x + 4)(x - 4)$  \_\_\_\_\_



5.  $y = (x - 5)(x - 5)$  \_\_\_\_\_



6.  $y = (2x - 1)(2x + 3)$  \_\_\_\_\_

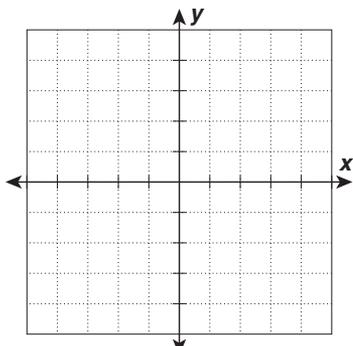


**LESSON**  
**2-3**

## Quadratic Functions

### *Technology Lab Recording Sheet: Explore Graphs and Factors* continued

7. **Critical Thinking** Use a graph to determine whether the quadratic function  $y = 2x^2 + 5x - 12$  is the product of the linear factors  $2x - 3$  and  $x + 4$ .




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8. **Make a Conjecture** Make a conjecture about the linear factors, x-intercepts, and axis of symmetry of a quadratic function.

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