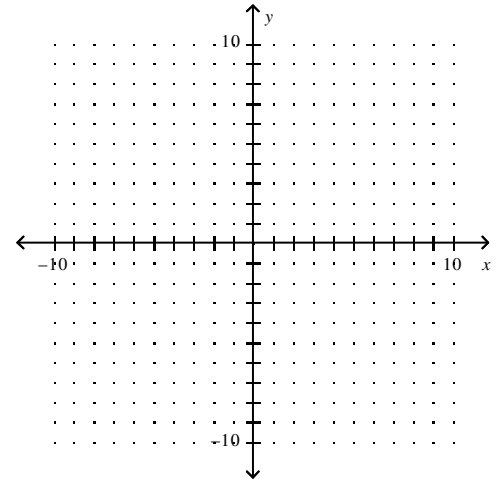
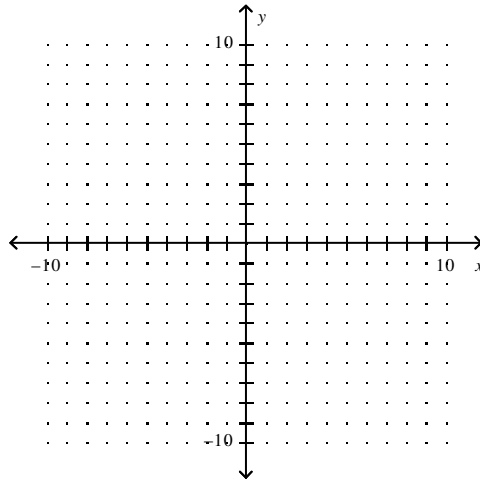
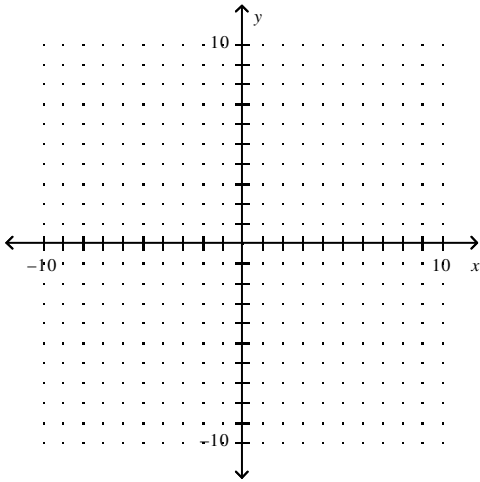


For 1 – 3, graph the function. Clearly show the vertex, axis of symmetry, and 4 other points.

1. $y = x^2 - 6x + 7$

2. $y = 2(x - 1)^2 - 4$

3. $y = -2(x - 4)(x - 2)$



Write the quadratic function in standard form.

4. $y = -2(x - 9)(x + 7)$

5. $y = -4(x + 6)(x - 8)$

6. $y = 3(x - 4)^2 - 8$

Describe how each graph relates to the parent graph $y = x^2$. Identify any vertical stretches or shrinks, reflections, and horizontal and vertical translations.

7. $y = -\frac{1}{2}x^2 + 5$

8. $y = 4(x - 1)^2 - 2$

9. $y = 5(x + 3)^2$