

Name: \_\_\_\_\_

Standard to Vertex Form

---

**Directions: Rewrite the equations in vertex form. Then, give the axis of symmetry and vertex.**

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

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

3)  $g(x) = 2x^2 - 8x + 17$

4)  $f(x) = 2x^2 + 12x + 7$

5)  $f(x) = x^2 + 6x + 8$

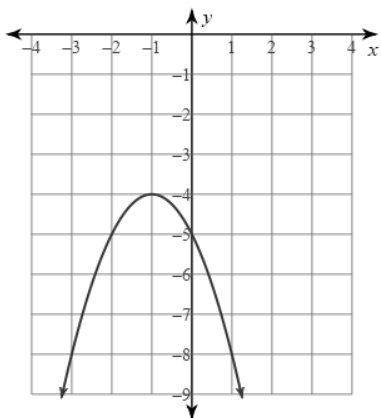
6)  $f(x) = x^2 - 4x + 3$

7)  $f(x) = 3x^2 + 24x + 50$

8)  $f(x) = -x^2 - 2x + 3$

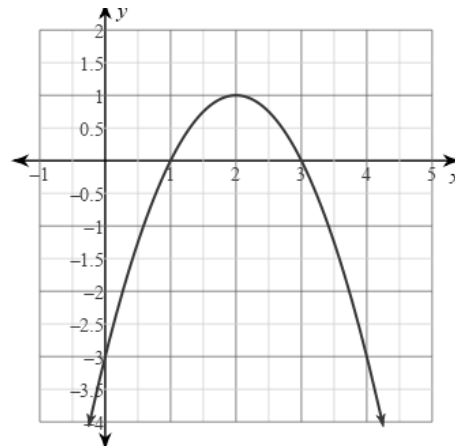
Write the equation for the following graph in Vertex form.

9.



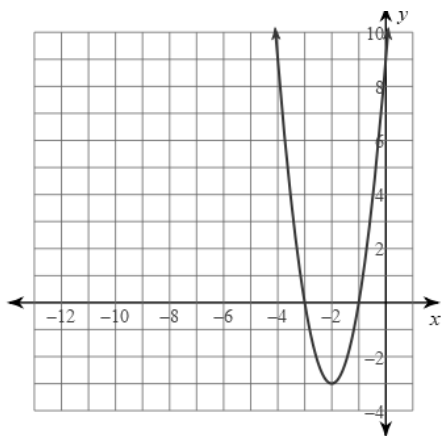
Vertex Form \_\_\_\_\_

10.



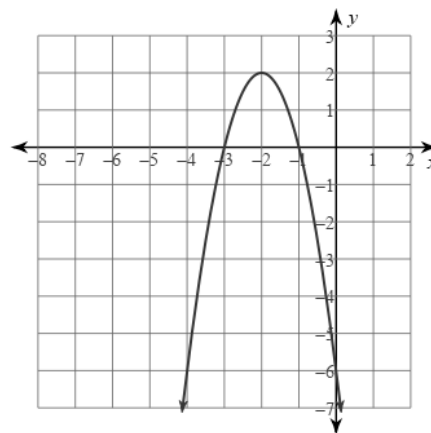
Vertex Form \_\_\_\_\_

11.



Vertex Form \_\_\_\_\_

12.



Vertex Form \_\_\_\_\_