

Graph each quadratic. Make sure to label all key components.

1. $f(x) = -(x + 2)(x - 4)$

Maximum or Minimum _____

Vertex _____

AOS _____

x – intercepts _____

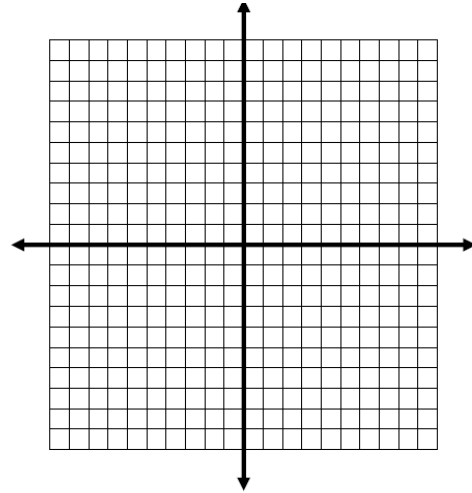
y – intercept _____

Domain _____

Range _____

Intervals of Increasing _____

Intervals of Decreasing _____



2. $f(x) = \frac{1}{2}x^2 + 3x + 4$

Maximum or Minimum _____

Vertex _____

AOS _____

x – intercepts _____

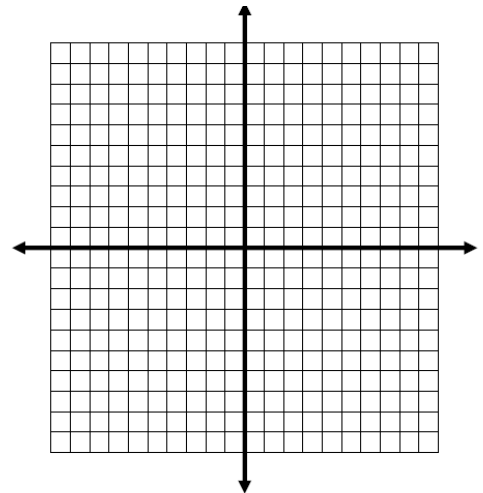
y – intercept _____

Domain _____

Range _____

Intervals of Increasing _____

Intervals of Decreasing _____



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

Maximum or Minimum

Vertex _____

AOS _____

x – intercepts _____

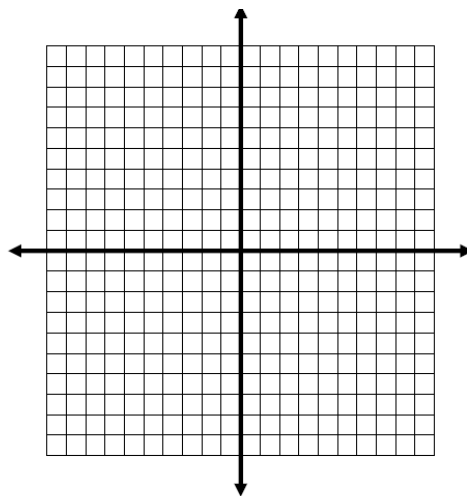
y – intercept _____

Domain _____

Range _____

Intervals of Increasing

Intervals of Decreasing



4. $f(x) = \frac{1}{2}(x - 5)(x + 1)$

Maximum or Minimum

Vertex _____

AOS _____

x – intercepts _____

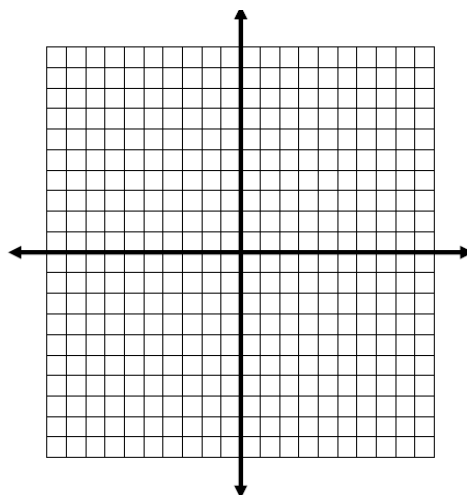
y – intercept _____

Domain _____

Range _____

Intervals of Increasing

Intervals of Decreasing



5. $f(x) = -x^2 - 4x + 5$

Maximum or Minimum

Vertex _____

AOS _____

x – intercepts _____

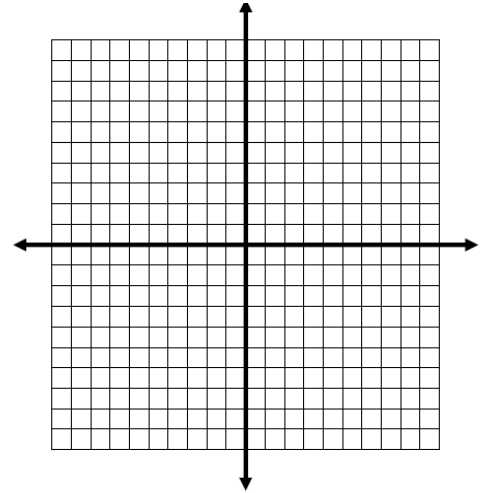
y – intercept _____

Domain _____

Range _____

Intervals of Increasing

Intervals of Decreasing



6. $f(x) = 2(x - 3)^2 - 2$

Maximum or Minimum

Vertex _____

AOS _____

x – intercepts _____

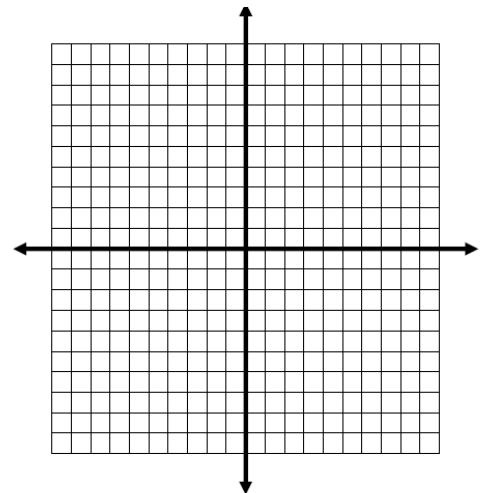
y – intercept _____

Domain _____

Range _____

Intervals of Increasing

Intervals of Decreasing



Write each equation in vertex form. Give the vertex and the y – intercept

7. $f(x) = x^2 - 4x - 12$

8. $g(x) = x^2 + 5x + 6$

Write the function in vertex form then graph the equation.

9. $f(x) = x^2 - 8x + 15$

Maximum or Minimum

Vertex _____

AOS _____

x – intercepts _____

y – intercept _____

Domain _____

Range _____

Intervals of Increasing

Intervals of Decreasing

