

Algebra 1
Section 8.5 Worksheet #2

Name _____

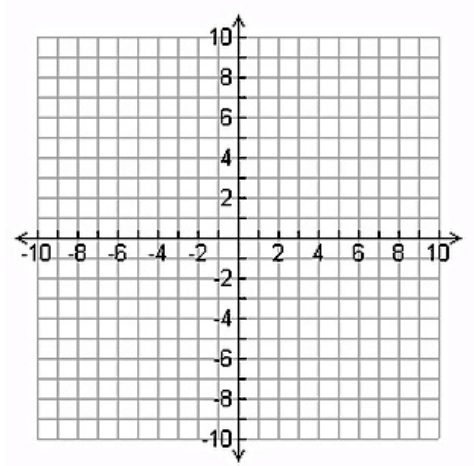
Graph the quadratic function. State the vertex, axis of symmetry, and x-intercepts. Describe the domain and range of the function using **set notation**.

1. $f(x) = (x + 3)(x - 1)$

vertex: AOS:

x-intercepts:

Domain: Range:

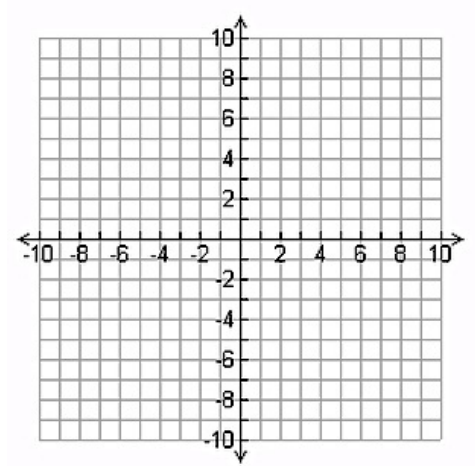


2. $y = -(x - 5)(x + 1)$

vertex: AOS:

x-intercepts:

Domain: Range:

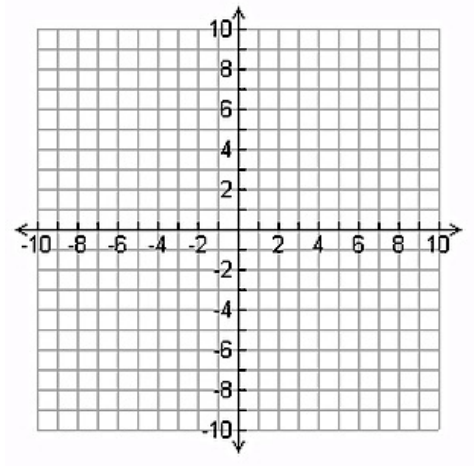


3. $y = x^2 + 8x + 7$ (Factor first!)

vertex: AOS:

x-intercepts:

Domain: Range:

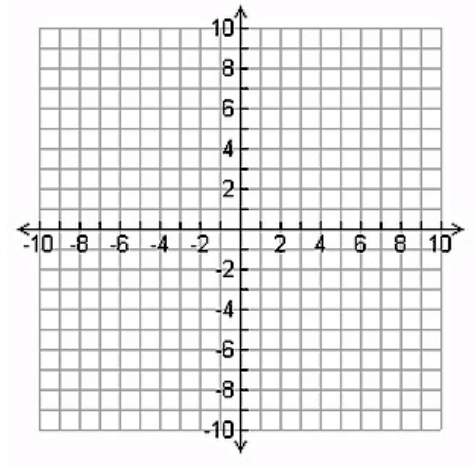


4. $f(x) = 2x^2 - 16x$ (Factor first!)

vertex: AOS:

x-intercepts:

Domain: Range:



Find the zeros of the function.

5. $f(x) = \frac{1}{4}(x + 3)(x - 2)$	6. $y = (x + 1)(x - 3)$
7. $g(x) = x^2 - 7x - 30$	8. $y = x^2 - x - 6$
9. $g(x) = -3x^2 + 30x - 63$	10. $y = 2x^2 - x - 10$

Use the given information to write a quadratic function in standard form whose graph satisfies the given conditions.

11. x-intercepts: 2 and 7	12. passes through: $(-4, 0)$ and $(2, 0)$
13. 