

Name _____

Worksheet Graphing Quadratics from Standard Form

Find the vertex, axis of symmetry, x-intercepts, y-intercept, value of the max/min, domain, and range of the following quadratics and then graph the parabola.

1. $f(x) = 3x^2$

vertex _____

axis _____

x-int _____

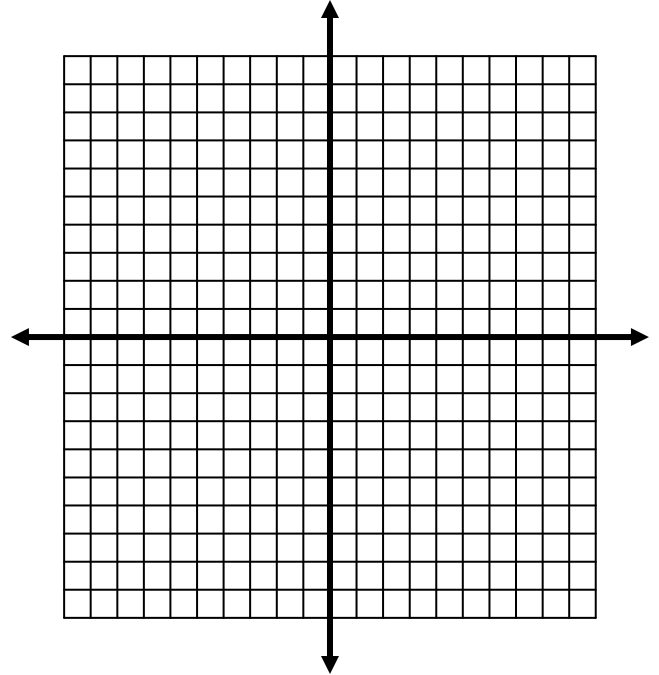
y-int _____

max/min _____

value _____

domain _____

range _____



2. $f(x) = x^2 + 2x + 1$

vertex _____

axis _____

x-int _____

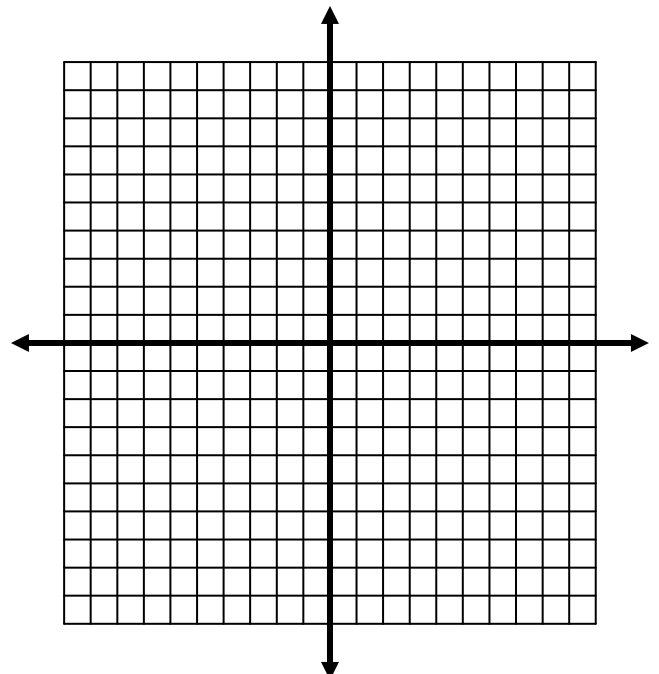
y-int _____

max/min _____

value _____

domain _____

range _____



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

vertex _____

axis _____

x-int _____

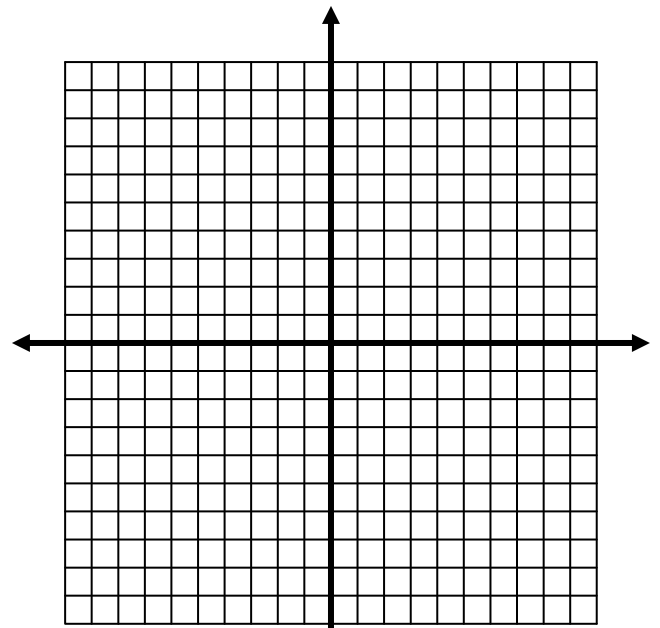
y-int _____

max/min _____

value _____

domain _____

range _____



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

vertex _____

axis _____

x-int _____

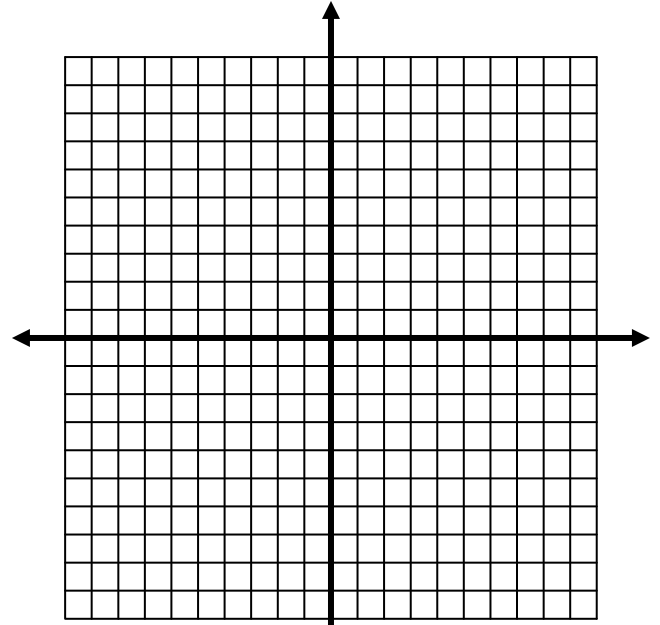
y-int _____

max/min _____

value _____

domain _____

range _____



5. $f(x) = x^2 - 10x + 9$

vertex _____

axis _____

x-int _____

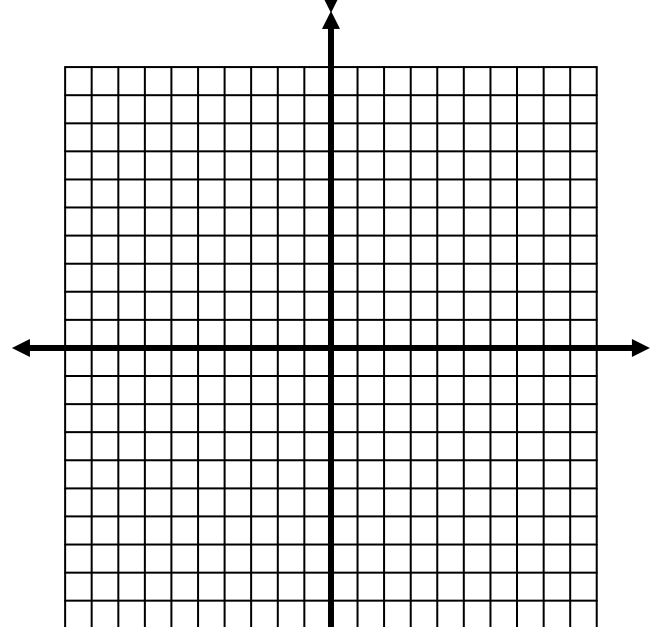
y-int _____

max/min _____

value _____

domain _____

range _____



6. $f(x) = -6x^2 - 4x - 5$

vertex _____

axis _____

x-int _____

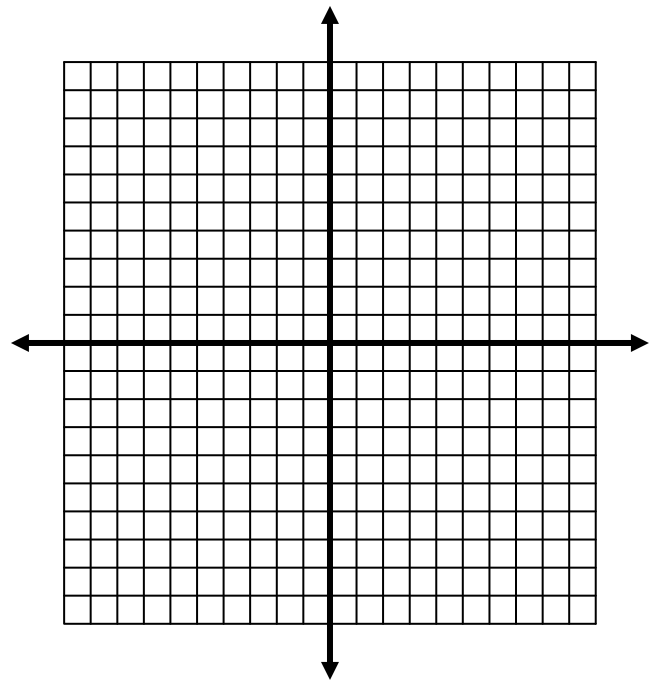
y-int _____

max/min _____

value _____

domain _____

range _____



7. $f(x) = x^2 - 9$

vertex _____

axis _____

x-int _____

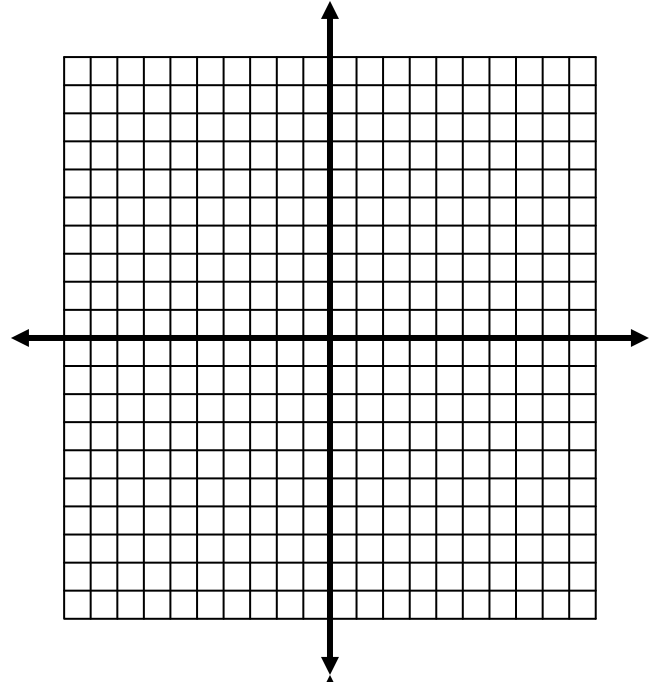
y-int _____

max/min _____

value _____

domain _____

range _____



8. $f(x) = 3x^2 + 6$

vertex _____

axis _____

x-int _____

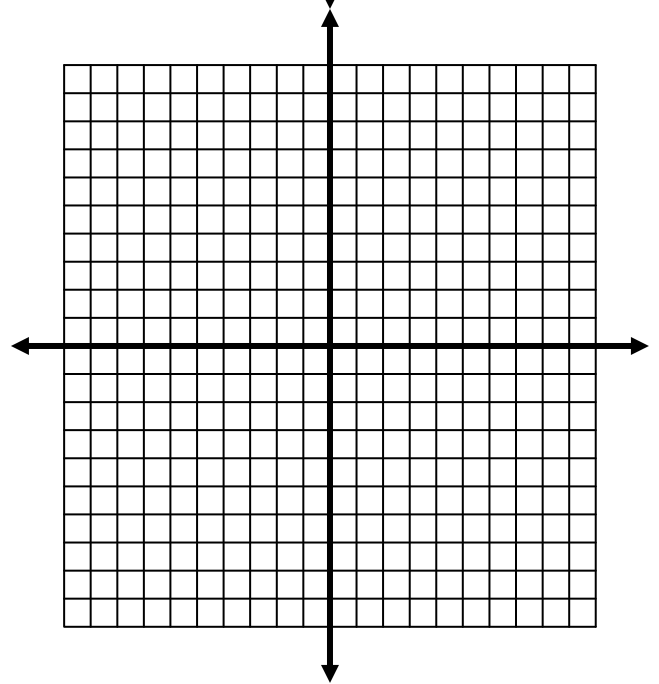
y-int _____

max/min _____

value _____

domain _____

range _____



Write the quadratic equation in standard form

9. $f(x) = (x - 3)(x + 2)$

10. $f(x) = 3(x - 2)^2 + 5$

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

12. $f(x) = 3(x - 6)(x + 2)$

13. $f(x) = 5(x + 6)^2 - 1$

14. $f(x) = (x - 1)^2$

Find the quadratic function, whose graphs have the given x -intercepts. and passes through the given point.

15. $(-1, 0)(3, 0)$ passing through $(5, 48)$

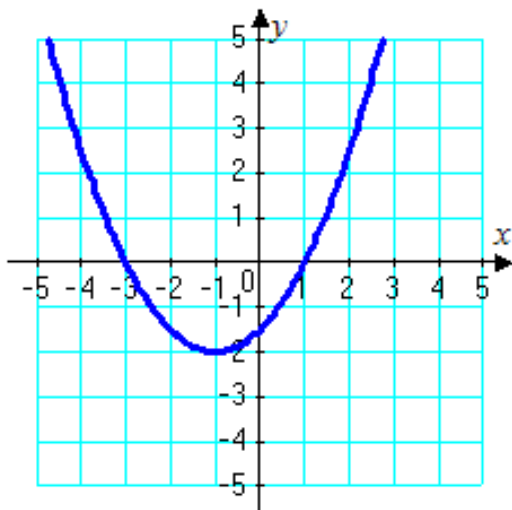
16. $(-5, 0)(5, 0)$ passing through $(7, 12)$

17. $(0, 0)(4, 0)$ passing through $(8, -8)$

18. $(\frac{1}{2}, 0)(-3, 0)$ passing through $(1, -12)$

Write the equation of the quadratic in standard form from the graph below

19. _____



20. _____

