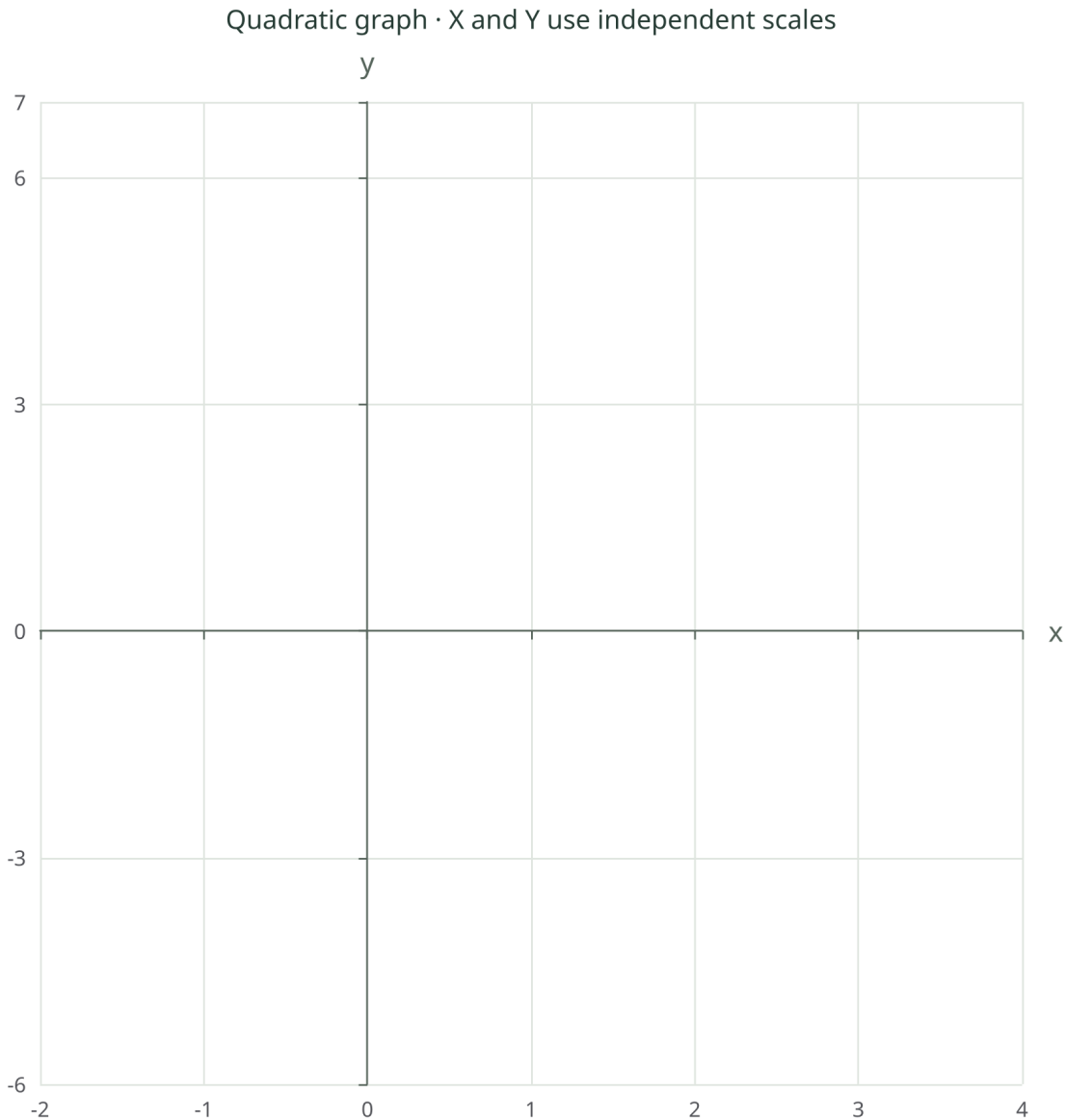


Quadratic graph calculator

Name: _____ Date: _____

$y = (1)x^2 + (-2)x + (-3)$

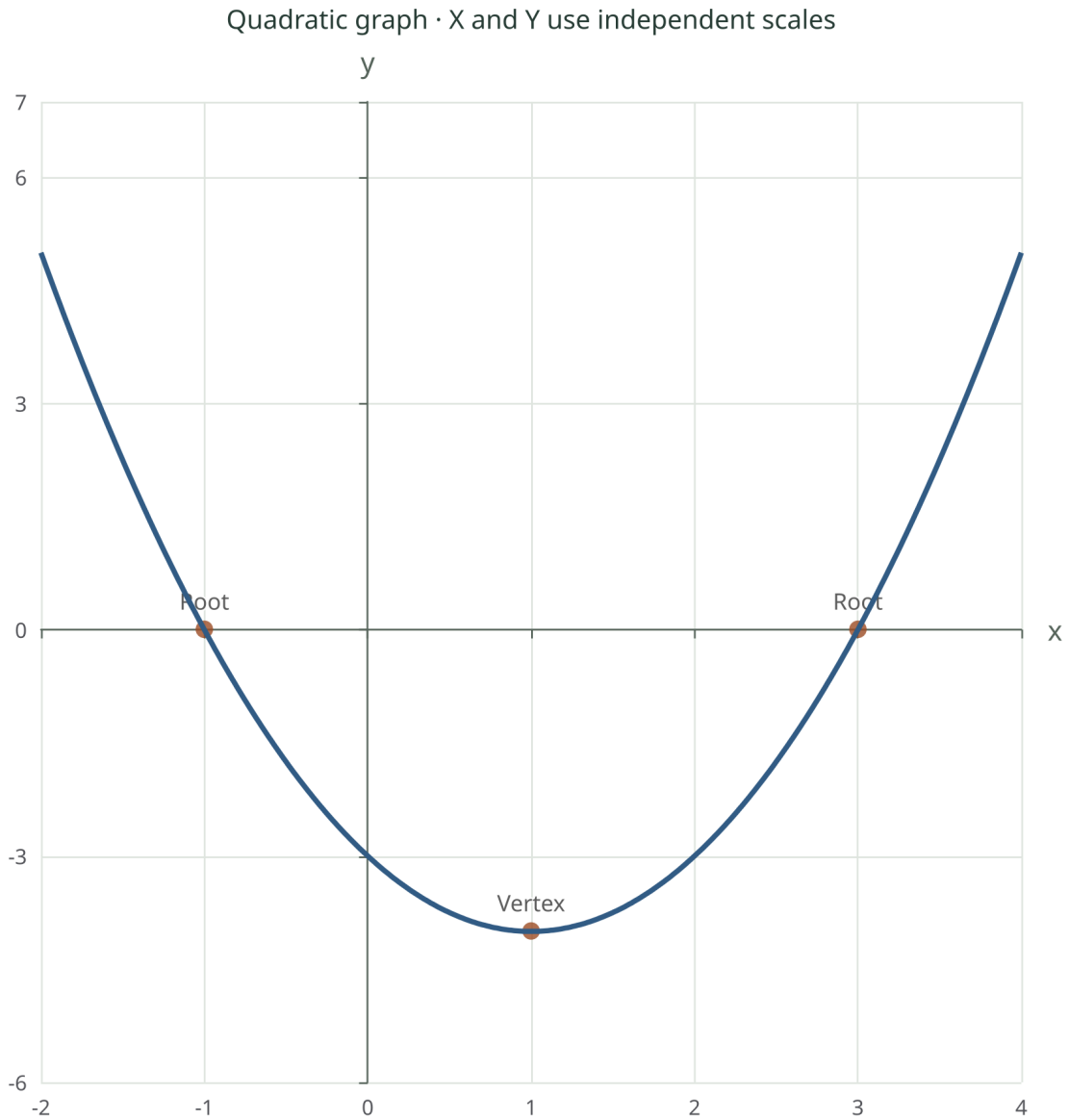


Find the vertex and axis of symmetry. Does the parabola open up or down?
Find the real roots and the y-intercept. Sketch the curve.

Quadratic graph calculator

ANSWER KEY

$$y = (1)x^2 + (-2)x + (-3)$$



Vertex (1, -4); symmetry line $x = 1$

Opens up; y-intercept (0, -3)

Discriminant $b^2 - 4ac = 16$

Real roots: -1, 3