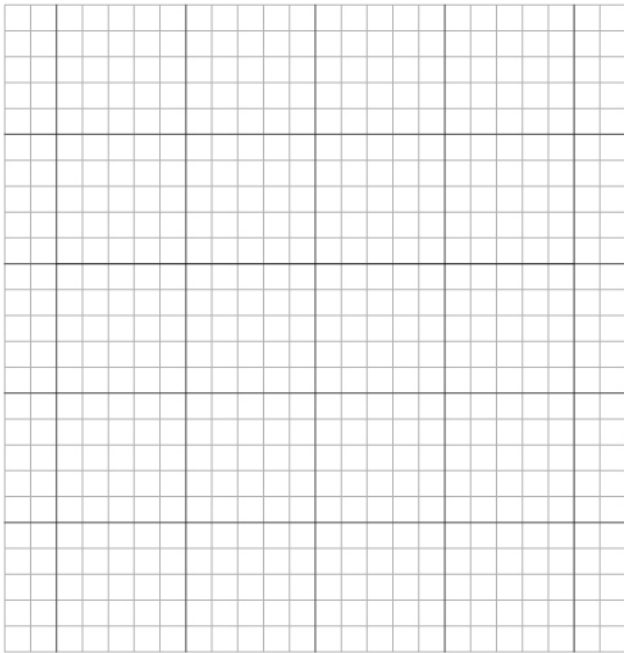


Graphing Quadratic Functions in Standard Form

Graph the given equations. Identify the axis of symmetry, vertex and y-intercept.

① $y = 2x^2 - 2x - 5$

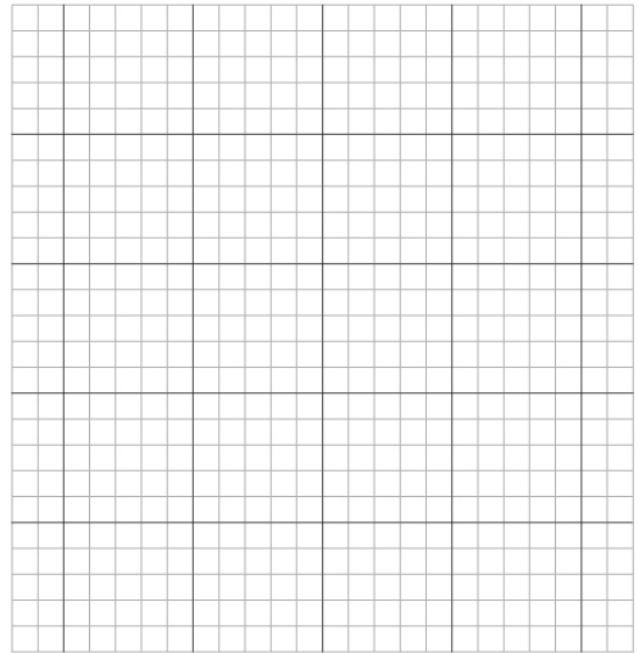


Vertex : _____

Axis of symmetry : _____

y-intercept : _____

② $y = -2x^2 - 10x + 9$

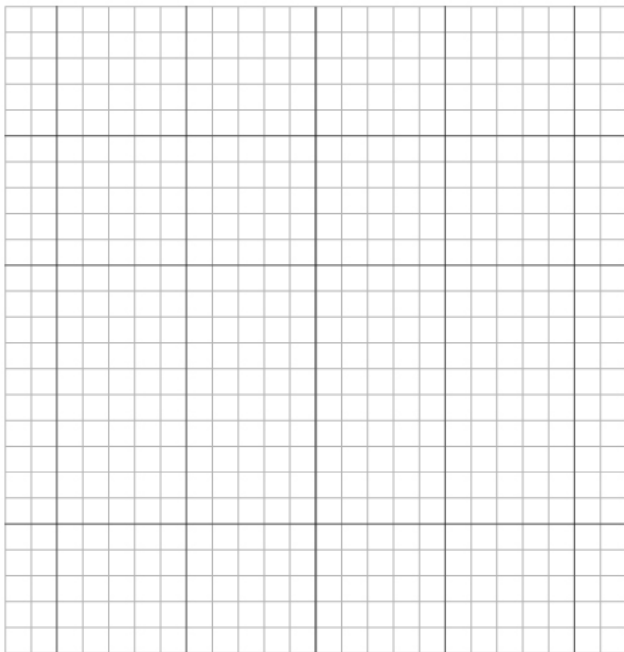


Vertex : _____

Axis of symmetry : _____

y-intercept : _____

③ $y = x^2 + 6x + 7$

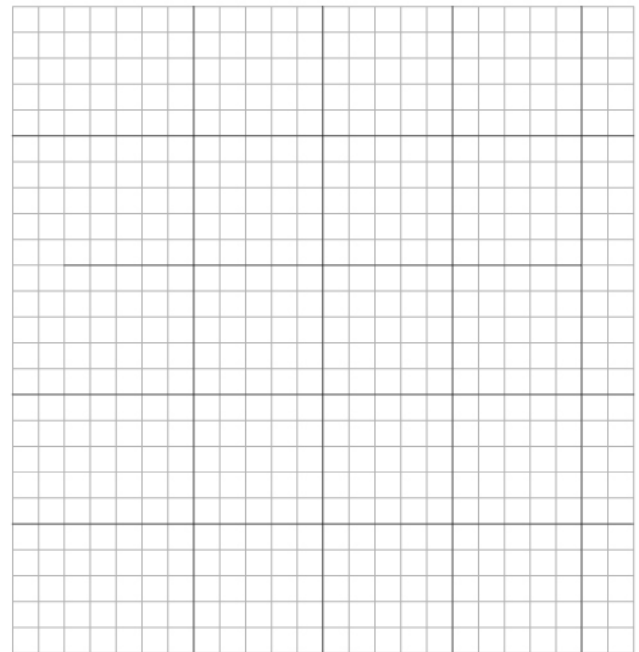


Vertex : _____

Axis of symmetry : _____

y-intercept : _____

④ $y = x^2 - 8x$



Vertex : _____

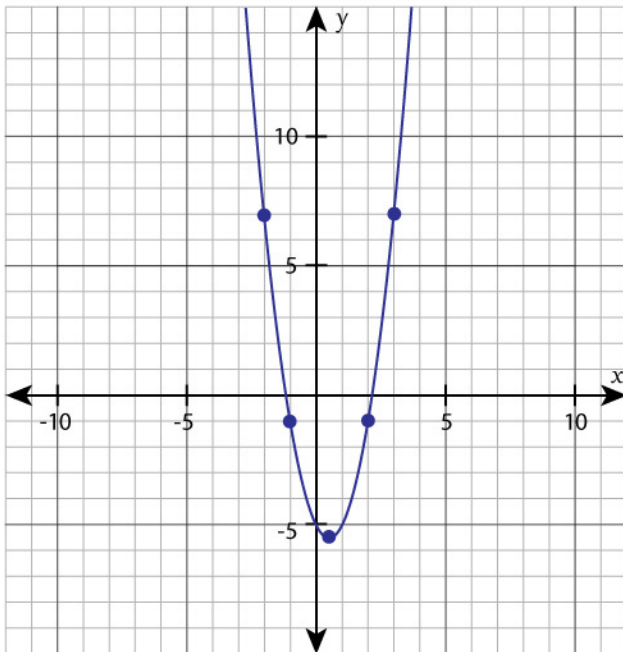
Axis of symmetry : _____

y-intercept : _____

Graphing Quadratic Functions in Standard Form

Answers

① $y = 2x^2 - 2x - 5$

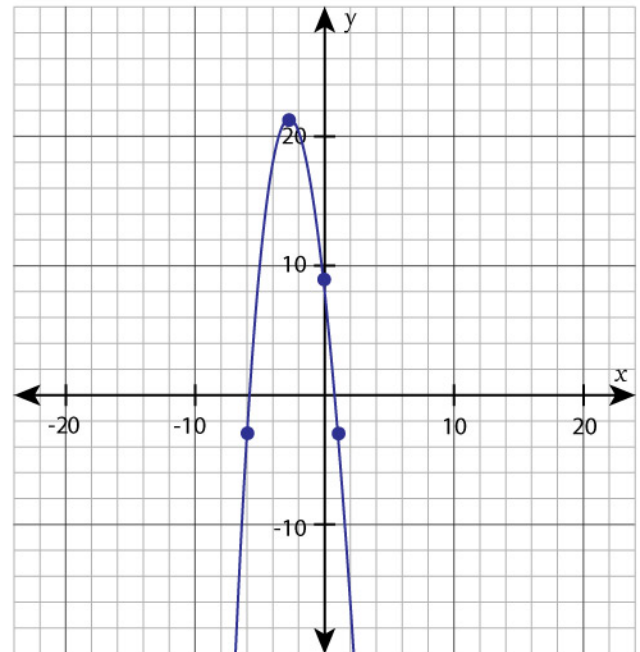


Vertex : $\left(\frac{1}{2}, -5\frac{1}{2}\right)$

Axis of symmetry : $x = \frac{1}{2}$

y-intercept : $(0, -5)$

② $y = -2x^2 - 10x + 9$

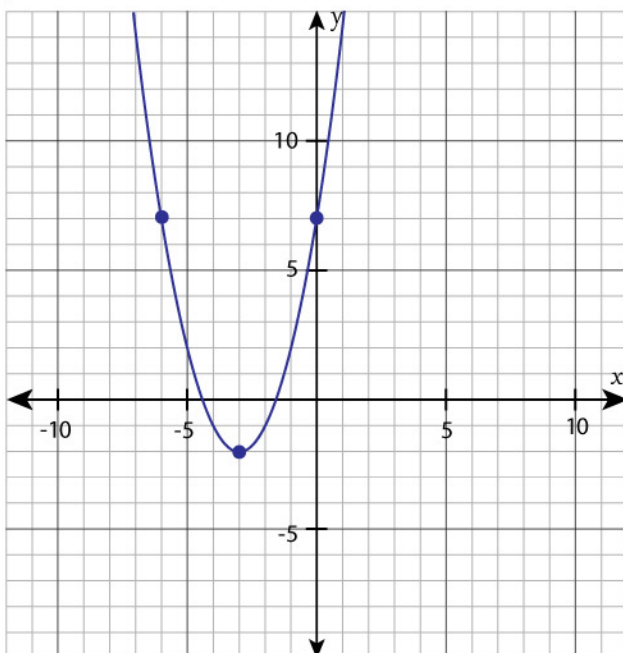


Vertex : $\left(-\frac{5}{2}, \frac{43}{2}\right)$

Axis of symmetry : $x = -2\frac{1}{2}$

y-intercept : $(0, 9)$

③ $y = x^2 + 6x + 7$

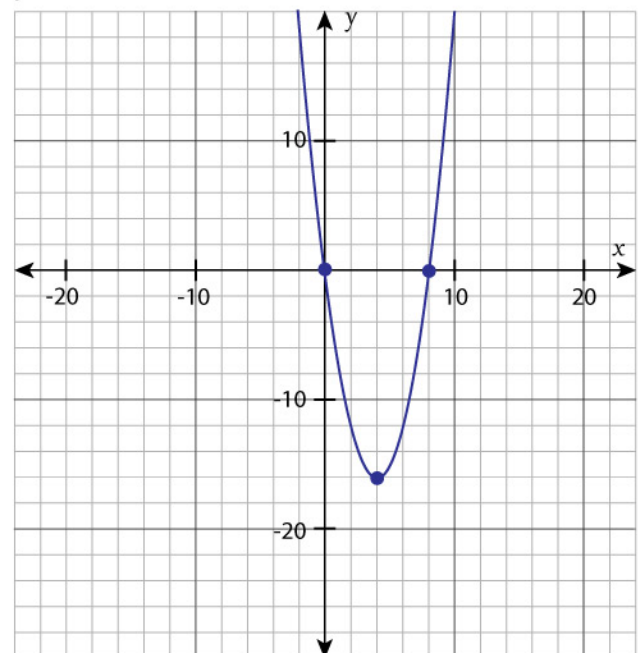


Vertex : $(-3, -2)$

Axis of symmetry : $x = -3$

y-intercept : $(0, 7)$

④ $y = x^2 - 8x$



Vertex : $(4, -16)$

Axis of symmetry : $x = 4$

y-intercept : $(0, 0)$