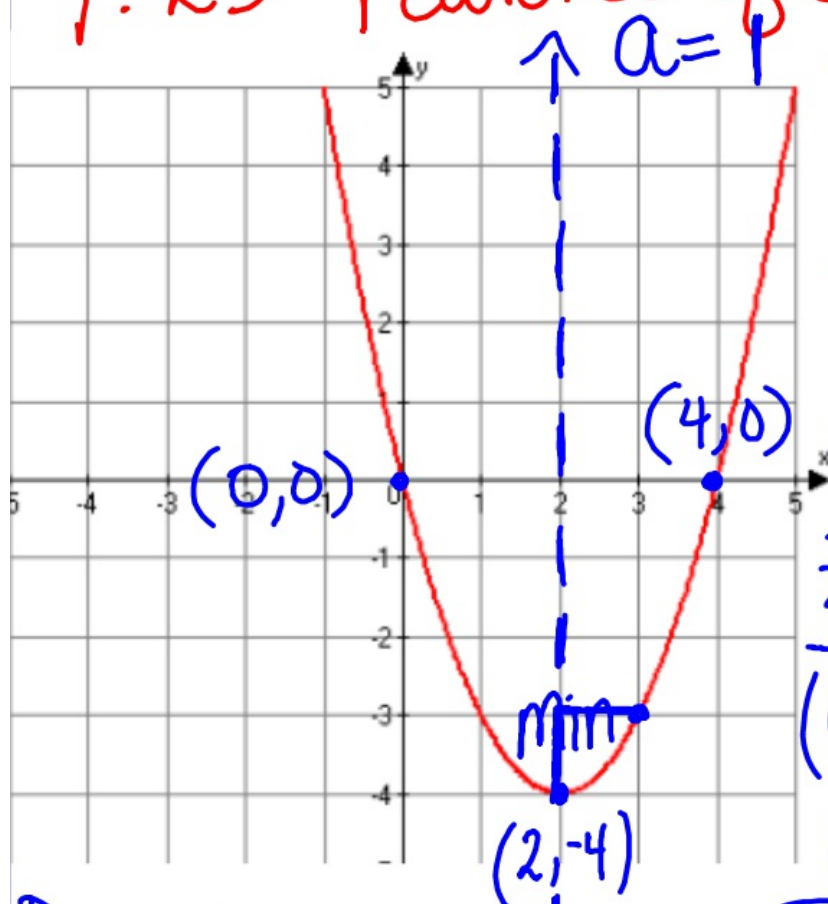


P. 23 Features of Quadratics



Vertex: $(2, -4)$

Axis of Symmetry:

$$x = 2$$

(x-value of vertex)

Zeros/Solutions/x-Int
Roots

$(0, 0)$ $(4, 0)$

y-intercept
 $(0, 0)$

Domain: $(-\infty, \infty)$

Range: $[-4, \infty)$

End Behavior: As $x \rightarrow -\infty$, $f(x) \rightarrow \infty$
As $x \rightarrow \infty$, $f(x) \rightarrow \infty$

Increasing: $[2, \infty)$ Decreasing: $(-\infty, 2]$

① Vertex: $(0, -4)$

A of S: $x = 0$

Zeros: $(-2, 0)(2, 0)$

y-int: $(0, -4)$

a = 1

② $(-2, 0)$

$x = -2$

$(-2, 0)$

$(0, -4)$

a = -2

③ $(-1, -4)$

vertex

$x = -1$ $(1, 0)(-3, 0)$ $(0, 3)$

A of S

Zeros

y-int a = 1