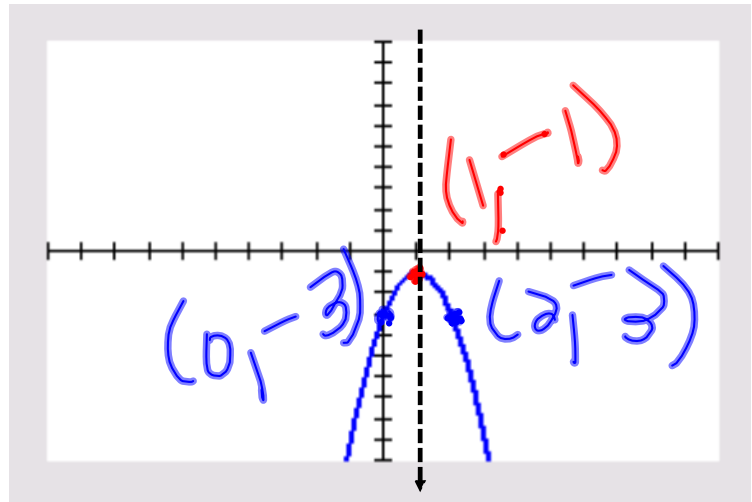


Starter

22 JAN 2018

Sketch the graph of the following:

$$y = -2x^2 + 4x - 3$$



$$8] y = -\frac{3}{2}x^2 + 3$$

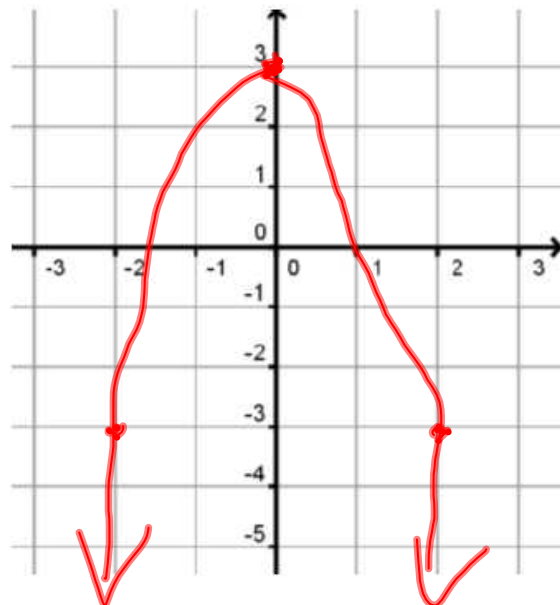
$$a = -\frac{3}{2} \quad b = 0 \quad c = 3$$

Opens up or down?

Is vertex a max or min?

y-intercept:

Axis of Symmetry

is $x = 0$ Vertex: $(0, 3)$ 

Find the coordinates $(2, -3)$ and $(-2, -3)$ to guide the shape of the parabola.

y-int 2nd trace 1 0 enter

vertex 2nd trace max/min

get pts 2nd graph

Set to ASK → 2nd WINDOW

9] $y = 2x^2 - 1$

a = b = c =

Opens up or down?

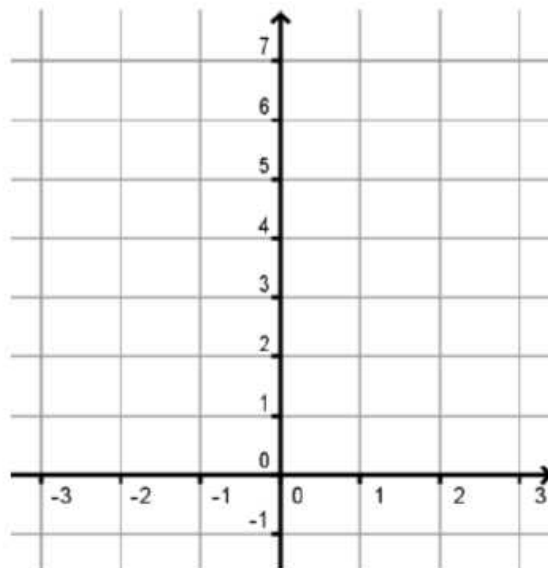
Is vertex a max or min?

y-intercept:

Axis of Symmetry

is $x =$ _____

Vertex: (_____, _____)



Find the coordinates $(2, \text{_____})$ and $(-2, \text{_____})$ to guide the shape of the parabola.

13] A baker has modeled the monthly operating costs for making wedding cakes by the function $y = \frac{1}{2}x^2 - 12x + 150$ where y is the total cost in dollars and x is the number of cakes prepared.

A] What is the minimum operating cost?

vertex
(12, 78)

\$78

B] How many cakes should be prepared to yield the minimum operating cost?

12 Cakes

14] The path that a motocross dirt bike rider follows during a jump is given by $y = -0.4x^2 + 4x + 10$ where x is the horizontal distance (in feet) from the edge of the ramp and y is the height (in feet). What is the maximum height of the rider during the jump?