October 12, 2017

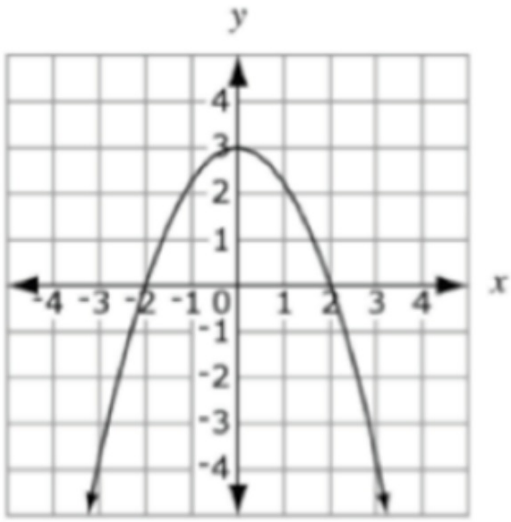
Warm Up

The function *j(x)* is shown at right.

a. What is the domain and range of *j(x)*?

b. What is the value of *j(2)?*

c. At what x values does *j(x)* = 2?



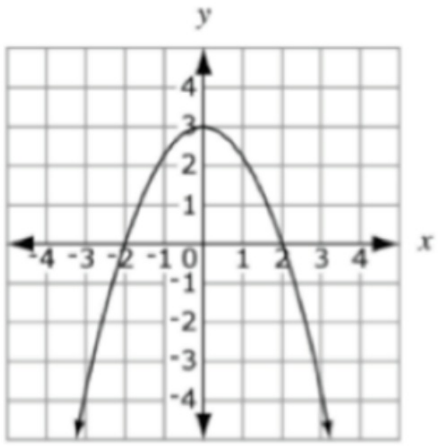
The Acme Bus Company has a daily ridership of 18,000 passengers and charges $1.00 per ride. The company wants to raise the fare yet keep its revenue as large as possible (revenue is found by multiplying the number of passengers by the fare charged). From previous fare increases, the company estimates that for each increase of $0.10, they will lose 1000 riders.

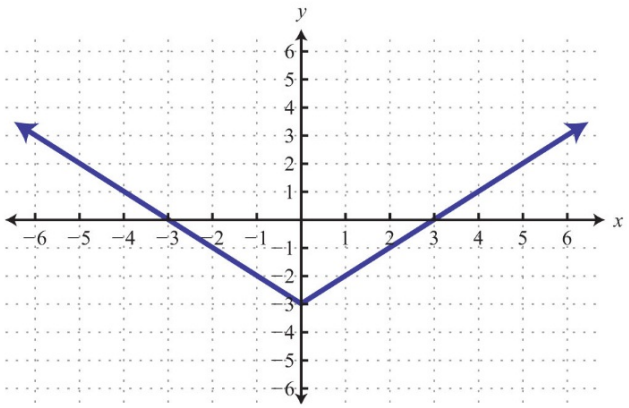
1. Create a table of fare (x) and revenue (y) for fares starting at $1.00 and going up to $2.00
2. Make a graph of the revenue versus far charged.
3. What are the coordinates of the vertex of the parabola? Explain the meaning of each coordinate of the vertex
4. Find a quadratic function that models this data. Use your model to find:

a. The revenue if the fare is $2.50

b. The fare(s) that make no revenue ($0)

L.T. I can write the equation of function given the graph of that function





L.T. I can write the equation of function given the graph of that function

Now: you try writing the equations of the given graphs

Then: Make sure your group problems are in the back basket

Later: Double check that the transformations that are on the whiteboard are in your notes