

Name:

ANSWERS!

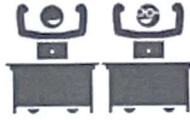
Class:



Communication



Successful Partnership



Encouragement



Solving Problem Together



Collaboration

Question 01

Graph the following three functions on Desmos:

$$a(x) = x^2 - 10x + 16$$

$$b(x) = (x - 2)(x - 8)$$

$$c(x) = (x - 5)^2 - 9$$

Part A: Do all three functions represent the same parabola?

yes!

Part B: What is the y-intercept of the function a(x)?

what is y when x=0?

(0, 16)

Part C: What are the TWO x-intercepts of the function a(x)?

what is x when y=0?

(2, 0) & (8, 0)

Part D: Does the parabola for function a(x) open upwards or open downwards?

upwards! ☺

Part E: What is the equation for the line of symmetry for function a(x)?

x = 5

Part F: What is the vertex for function a(x)?

same!  
(5, -9)