**Group Discussion Prompt:** Suppose you are using a computer to draw a face on a coordinate plane. The eyes are at (–3, 3) and (3, 3). The tip of the nose is at the origin. To make a smiling mouth, you are going to enter the equation for the graph of a quadratic function, with its appropriate domain.

Post the quadratic function that you would use (in any form) with the domain. Explain how you determined your equation and why you wrote it in the form that you did.

A. Choose a smile function from another student. Discuss how their graph compares to your graph. Tell how you can see these differences by analyzing the equations.

B. If someone chooses your smile function for a comparison, tell if you agree or disagree with their discussion, and why.

Respond to the above prompt

Also, Answer properly to the following two Discussion

Moreno posted Feb 4, 2017 12:13 AM

My smile is at -2 and 2 and the vertex is 0,-2

(-2,0)

(4,0)

(0,-4) is the vertex

x^2-4x+4x=8=x^2-8

x^2-8

vertex is a(x-h)^2+l

a(x-0)^2-4

so my smiley face would be (0-4), (0,4) and (4,4),(-4,4)

Georgia Drummy posted Jan 20, 2017 11:16 AM

The roots of my equation are 2,-2. Factors ( x - 2) ( x + 2). The equation is x^​2 - 4.

* [Scan0017 (1).pdf(207.12 KB)](https://learning.k12.com/d2l/le/149669/discussions/posts/3454970/ViewAttachment?fileId=7522471)…See the SCAN Attachment