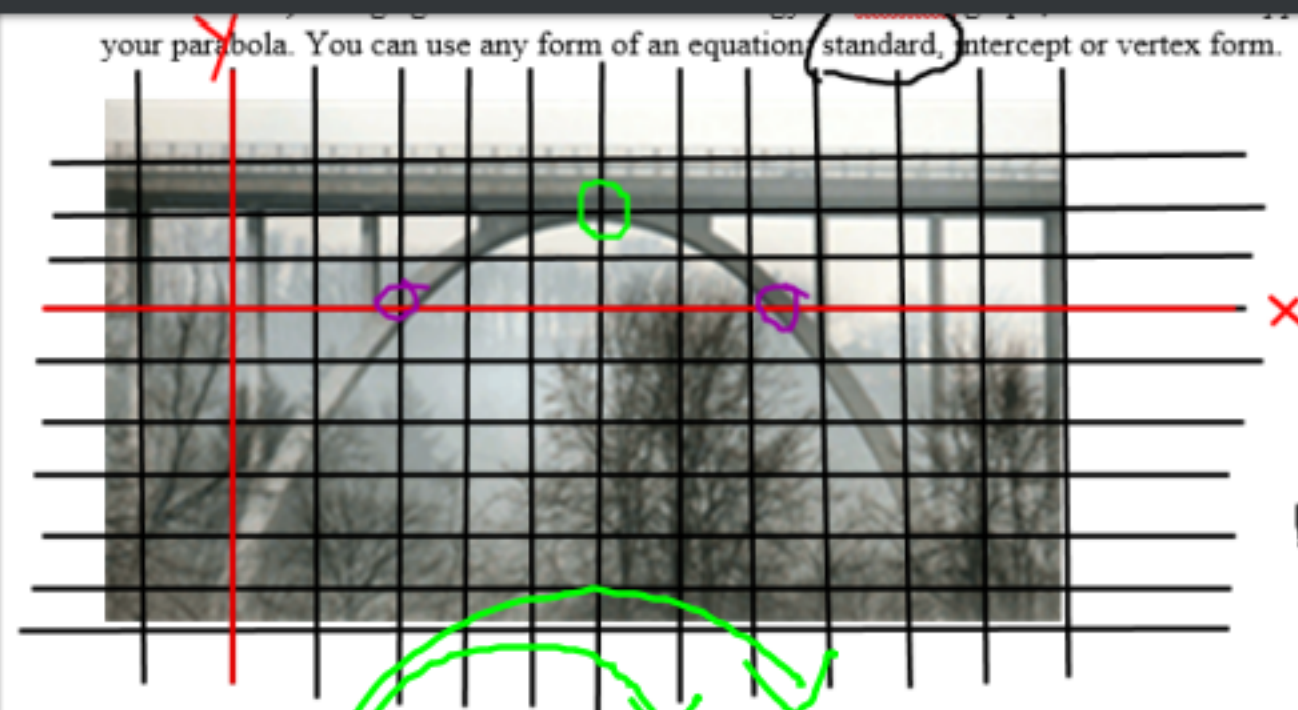




vertex = (5, 2)  
 x int: 2, 7.5  
 $a = -0.27$   
 vertex form:  
 $y = -0.27(x - 5)^2 + 2$

$y = -0.27(x - 5)(x - 5) + 2$   
 $y = -0.27(x^2 - 5x - 5x + 25) + 2$   
 $y = -0.27(x^2 - 10x + 25) + 2$   
 $y = -0.27x^2 + 2.7x - 6.8 + 2$   
 $y = -0.27x^2 + 2.7x - 4.8$



Determine the equation of the parabola, using only the graph. Name: \_\_\_\_\_

2) Log on to a computer and try this one on your own. Determine the equation for the parabola of the smile.  
Draw a consistent grid to give you easy vertex values. This is key to making these questions simpler.

Equation of Smile: \_\_\_\_\_ Equation of the circle: \_\_\_\_\_



★ No O's for vertex

★ Use desmos to solve for  $a$

★ Vertex form changed to standard.