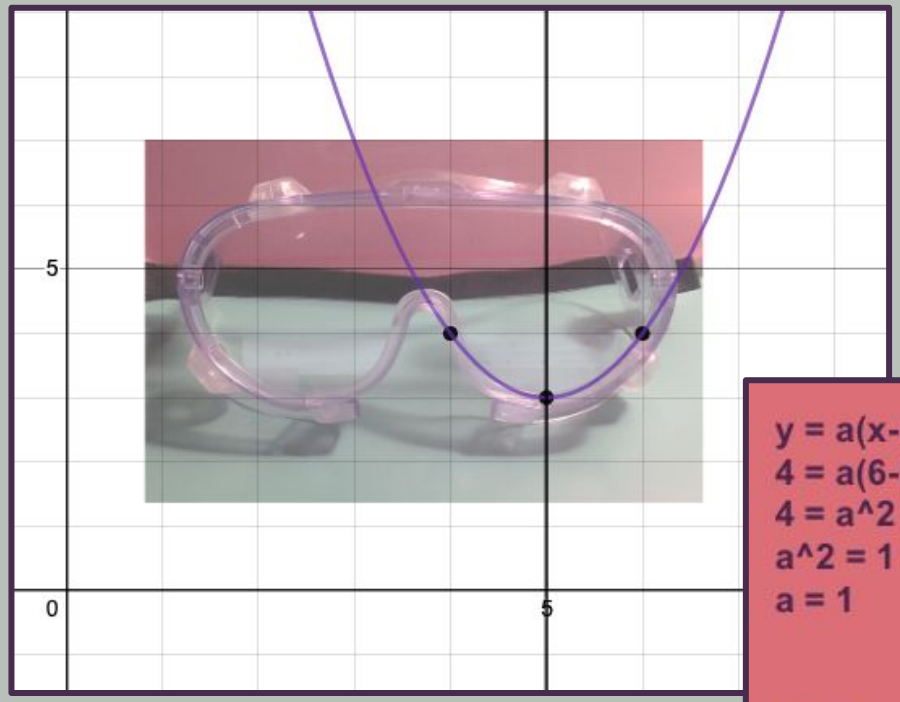

Parabola Selfie!

$$y = x^2 - 10x + 28$$

$$y = (x-5)^2 + 3$$

y = a(x-5)^2 + 3 (6,4)
4 = a(6-5)^2 + 3
4 = a^2 + 3
a^2 = 1
a = 1

y = (x-5)^2 + 3
y = (x-5)(x-5) + 3
y = x^2 -5x -5x + 25 + 3
y = x^2 -10x + 28

Quadratic Equation: y = (x-5)^2 + 3
Standard Form: y = x^2 -10x + 28

Axis of Symmetry	x = 5	Domain	$-\infty < x > \infty$
Vertex	(5,3)	Range	$y \geq 3$
Y-intercept	(0,28)	Interval of Increase	a = 1
Point + Reflection	(4,4) → (6,4)	Minimum	(5,3)

I took my parabola selfie with my safety goggles from Chemistry class. One lens measures 2.75 in. across and 1.5 in. from the vertex to the nose piece.