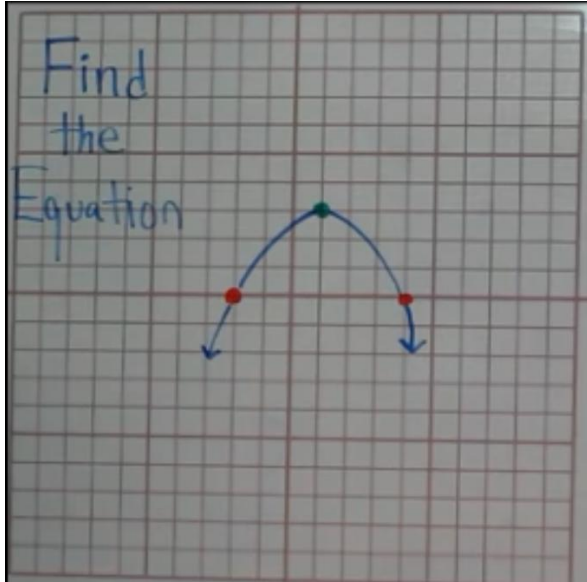


Write the equation of a Parabola given the Graph!

This video shows how to find the **Factored Form Equation** of a Parabola given the graph



<http://www.youtube.com/watch?v=igoQrrFM06s>

Factored Form:

$$y = -1/3 (x + 2)(x - 4)$$

To get the **Standard Form Equation** of the Parabola, multiply the factors and distribute the "a" value.

$$y = -1/3 (x^2 - 2x - 8) \quad \text{use FOIL to multiply the factors}$$

$$y = -1/3 x^2 + 2/3 x + 8/3 \quad \text{distribute the "a" value of -1/3 to all the terms}$$

Standard Form:

$$y = -1/3 x^2 + 2/3 x + 8/3$$