10.2 - Review - Warm - up

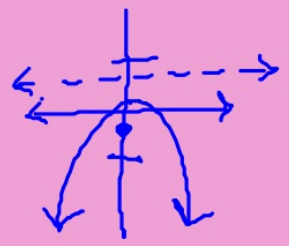
directrix $y = 1/2$

1. What is an equation of the parabola with vertex at the origin and focus $(0, -0.5)$?

$y = ax^2$

$a = \frac{1}{4c} = \frac{1}{4(-.5)} = -\frac{1}{2}$ ✓

$y = -\frac{1}{2}x^2$



focus: $(c, 0)$ $(1/12, 0)$

2. What is an equation of the parabola with vertex at the origin and directrix $x = -\frac{1}{12}$?

$x = ay^2$

$a = \frac{1}{4c} = \frac{1}{4(1/12)} = \frac{1}{1/3} = 3$ ✓

$\frac{1}{1} \div \frac{1}{3} = \frac{1}{1} \cdot \frac{3}{1} = 3$

$x = 3y^2$