

Group: _____ Present: _____

1. Find the equation of an ellipse which has center at the origin, major axis of length 6 and minor axis of length 4.

2. Many conic sections are not functions (they fail the vertical line test). How can we view such a conic section on a graphing calculator? We may need to graph two separate pieces!

- (a) $y^2 = 2ax$ is the equation of what type of conic? _____

Solve the equation for y : $y =$ _____

Write the two functions that you enter into the calculator:

$Y_1 =$ _____ $Y_2 =$ _____

Viewing window for complete graph: $[\text{____}, \text{____}] \times [\text{____}, \text{____}]$

- (b) $\frac{x^2}{9} + \frac{y^2}{16} = 1$ is the equation of what type of conic? _____

Solve the equation for y :

$y =$ _____

Write the two functions that you enter into the calculator:

$Y_1 =$ _____ $Y_2 =$ _____

Viewing window for complete graph: $[\text{____}, \text{____}] \times [\text{____}, \text{____}]$

- (c) $\frac{x^2}{4} - \frac{y^2}{9} = 1$ is the equation of what type of conic? _____

Solve the equation for y :

$y =$ _____

Write the two functions that you enter into the calculator:

$Y_1 =$ _____ $Y_2 =$ _____

Viewing window for complete graph: $[\text{____}, \text{____}] \times [\text{____}, \text{____}]$