Graphing Parabolas

Name _____

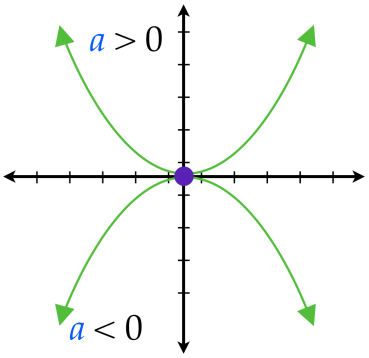
Date _____ Period _____

Parabolas

$x^2 = 4ay$

Vertex (0,0) Directrix $y = -a$

Focus $(0,a)$ Axis of Symmetry $x = 0$



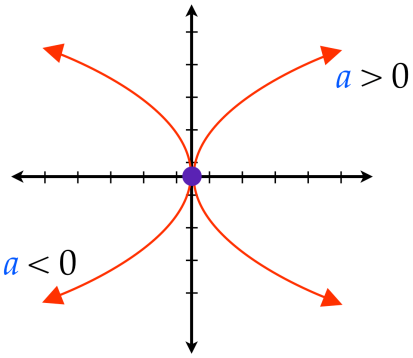
Latus Rectum

LR = $|4a|$

$y^2 = 4ax$

Vertex (0,0) Directrix $x = -a$

Focus $(a,0)$ Axis of Symmetry $y = 0$



Graph the following parabola

$x^2 = 12y$

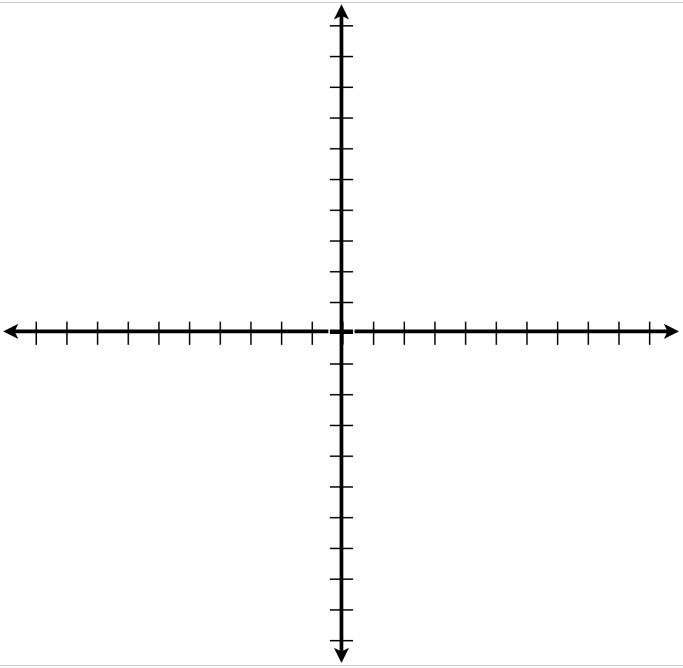
Vertex

Focus

Directrix

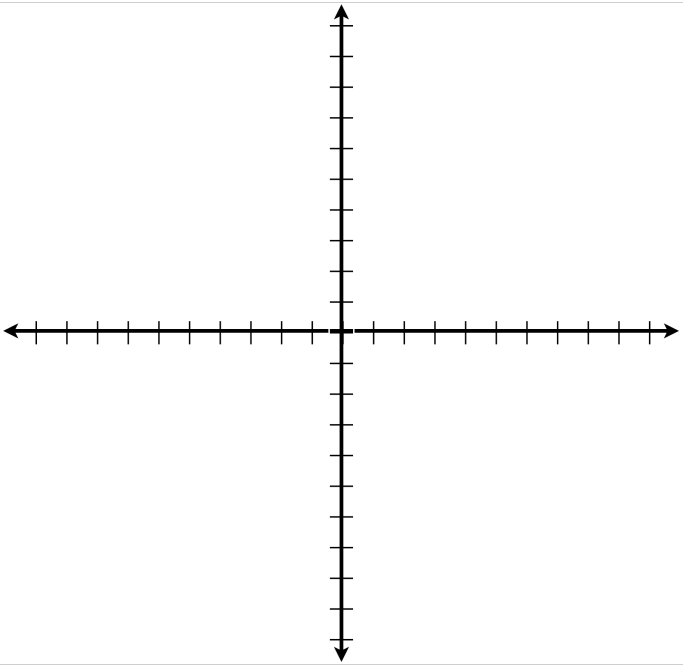
Axis of Symmetry

Latus Rectum



Graph the following parabola

$y^2 = -16x$



Vertex

Focus

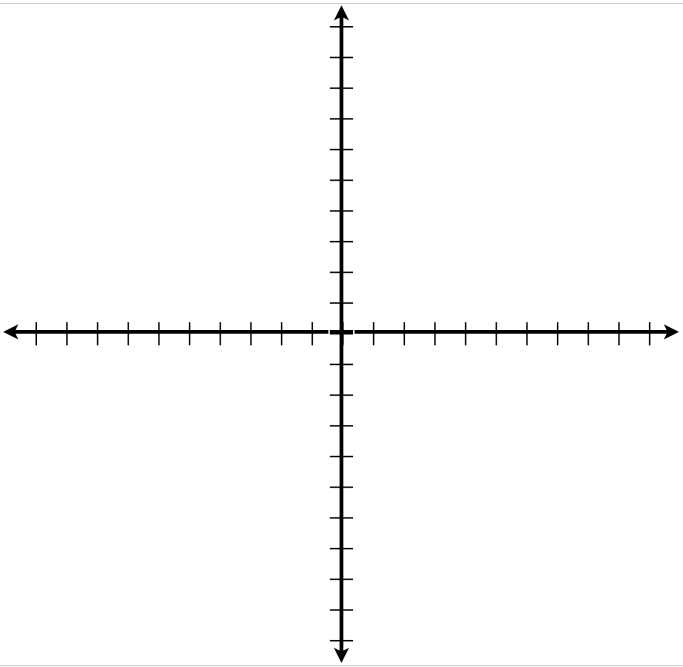
Directrix

Axis of Symmetry

Latus Rectum

Graph the following parabola

$(x - 4)^2 = -8(y - 3)$



Vertex

Focus

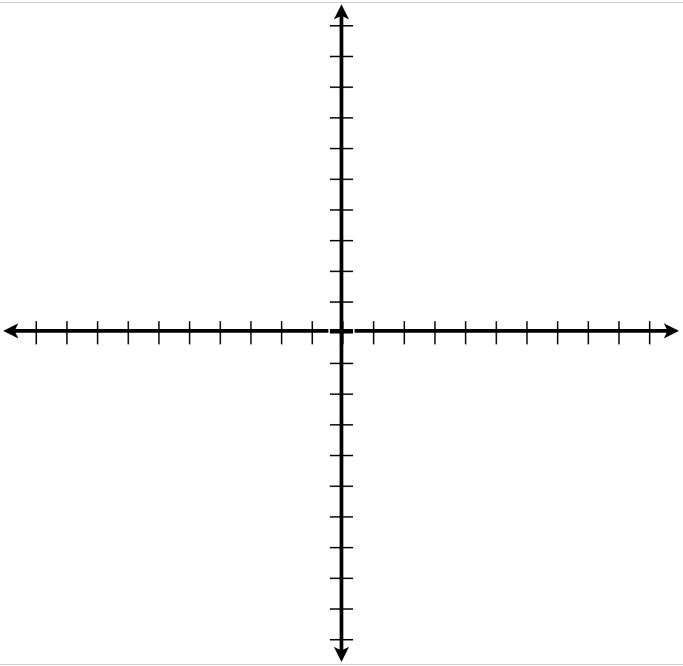
Directrix

Axis of Symmetry

Latus Rectum

Graph the following parabola

$(y + 1)^2 = 20(x + 6)$



Vertex

Focus

Directrix

Axis of Symmetry

Latus Rectum