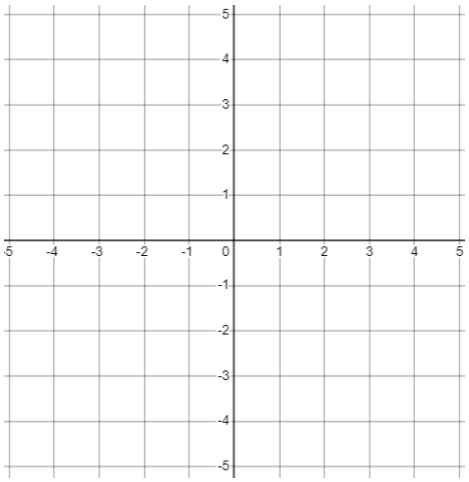
Name:_____

Practice Quest Conics

Directions: Please create the standard form of the following parabola and then graph it. Include the equation of the directrix, the vertex, the focus and the endpoints of the focal chord width.

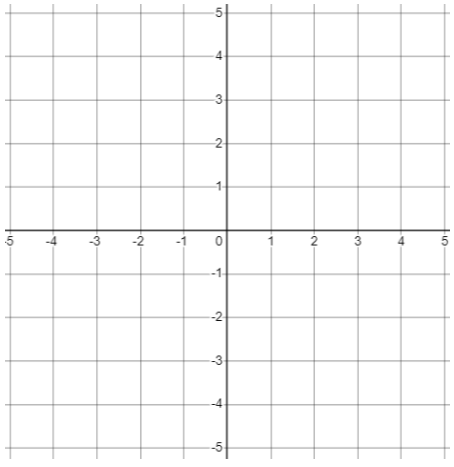
1. $x^2 - 4x + 2y - 2 = 0$



vertex	
directrix	
focus	
Endpoints of focal width chord	

Directions: Please create the standard form of the following hyperbola and then graph it. Include the equation of the asymptotes, the vertices, the co-vertices and the foci and the endpoints of the focal chord width.

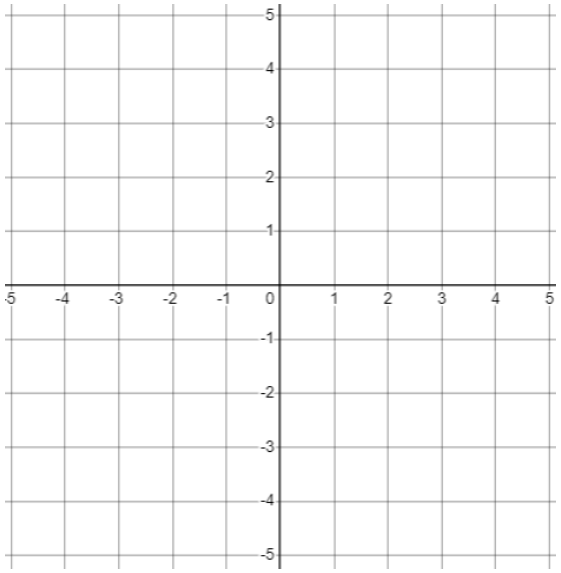
2. $3y^2 - x^2 - 12y - 2x + 8 = 0$



center	
vertices	
co-vertices	
foci	
asymptotes	

Directions: Please create the standard form of the following ellipse and then graph it. Include the equation of the directrix, the vertex, the focus and the endpoints of the focal chord width.

3. $2x^2 + 4y^2 = 8$



center	
vertices	
co-vertices	
foci	

Directions: Please use the following matching to determine the type of conic of the given equation.

_____	4. Ellipse	A.	$4x^2 - 3y + 2x = 9$
_____	5. Circle	B.	$x^2 - y^2 + 6y = 9$
_____	6. Parabola	C.	$(x-4)^2 + (y-9)^2 = 2$
_____	7. Hyperbola	D.	$2x^2 + 4y^2 - 6x = 9$

Directions: Please write the standard form equation of the following conic described. Show your work.

An ellipse with foci of (-2, -5) and (-2, 7) and a minor axis length of 6.