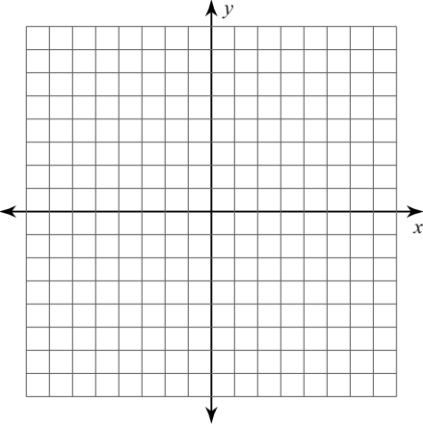
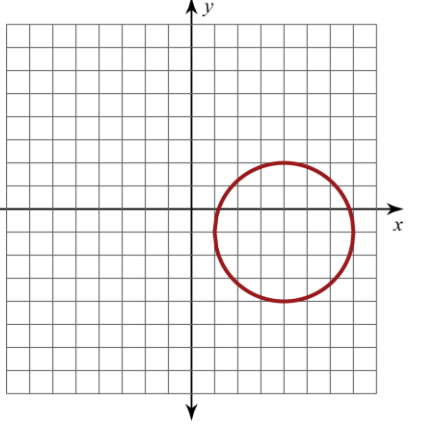
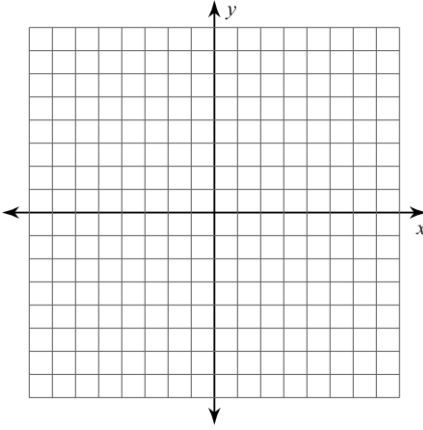
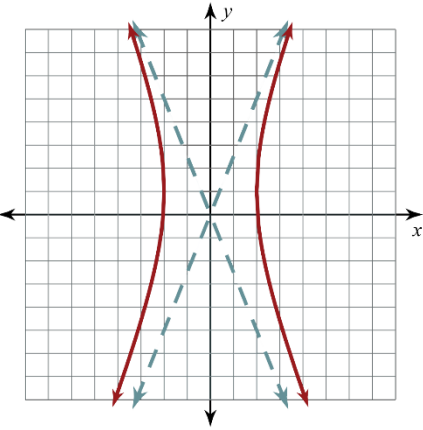


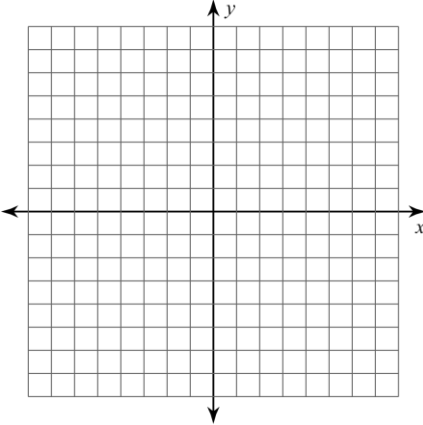
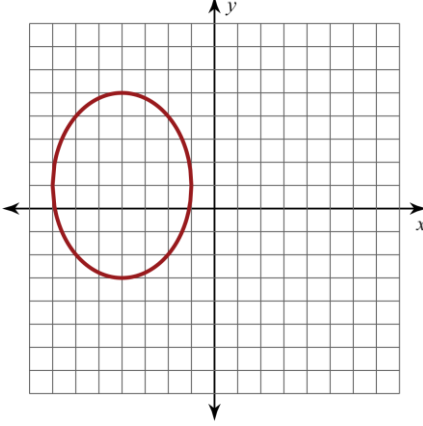
CONIC SECTIONS – CIRCLES

General	Practice	
Key Features	Equation and Key Features	Sketch
$(x-h)^2 + (y-k)^2 = 1$ <p>Center: (,)</p> <p>Radius: _____</p>	$(x-4)^2 + (y-4)^2 = 1$ <p>Center: (,)</p> <p>Radius: _____</p>	
$x^2 + y^2 = r^2$ <p>Center: (,)</p> <p>Radius: _____</p>		

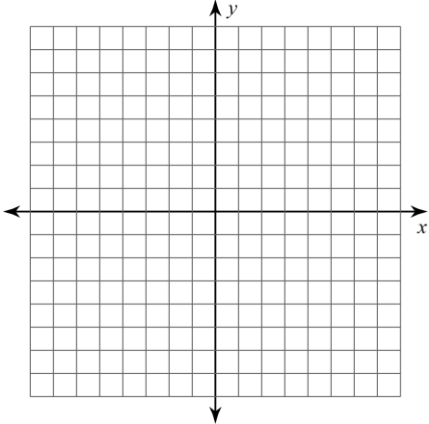
Conic Sections – Hyperbola

General	Practice	
Key Features	Equation and Key Features	Sketch
$\frac{(x-h)^2}{a^2} - \frac{(y-k)^2}{b^2} = 1$ <p>Center: (,)</p> <p>Asymptotes: _____ & _____</p> <p>Vertices: (,) & (,)</p>	$\frac{x^2}{16} - \frac{y^2}{4} = 1$ <p>Center: (,)</p> <p>Asymptotes: _____ & _____</p> <p>Vertices: (,) & (,)</p>	
$\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$ <p>Center: (,)</p> <p>Asymptotes: _____ & _____</p> <p>Vertices: (,) & (,)</p>		

Conic Sections – Ellipse

General	Practice	
Key Features	Equation and Key Features	Sketch
$\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$ <p>Center: (,)</p> <p>If _____, then major axis: parallel to x-axis, length is $2a$ minor axis: length is $2b$</p> <p>If _____, then major axis: parallel to y-axis, length is $2b$ minor axis: length is $2a$</p>	$\frac{(x-2)^2}{25} + \frac{(y+3)^2}{4} = 1$ <p>Center: (,)</p> <p>Major axis: parallel to the ____ – axis</p> <p>Length of major axis: _____</p> <p>Length of minor axis: _____</p>	
$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ <p>Center: (,)</p> <p>If _____, then major axis: parallel to x-axis, length is $2a$ minor axis: length is $2b$</p> <p>If _____, then major axis: parallel to y-axis, length is $2b$ minor axis: length is $2a$</p>		

Conic Sections – Parabola

General	Practice	
Key Features	Equation and Key Features	Sketch
$y = a(x-h)^2 + k$ <p>Vertex: (,)</p> <p>When $a > 0$, opens: _____</p> <p>When $a < 0$, opens: _____</p> <p>Focus: (,)</p> <p>Directrix: _____</p>	$y = -2(x+1)^2 - 1$ <p>Vertex: (,)</p> <p>Opens: _____</p> <p>Focus: (,)</p> <p>Directrix: _____</p>	
$x = a(y-k)^2 + h$ <p>Vertex: (,)</p> <p>When $a > 0$, opens: _____</p> <p>When $a < 0$, opens: _____</p> <p>Focus: (,)</p> <p>Directrix: _____</p>		