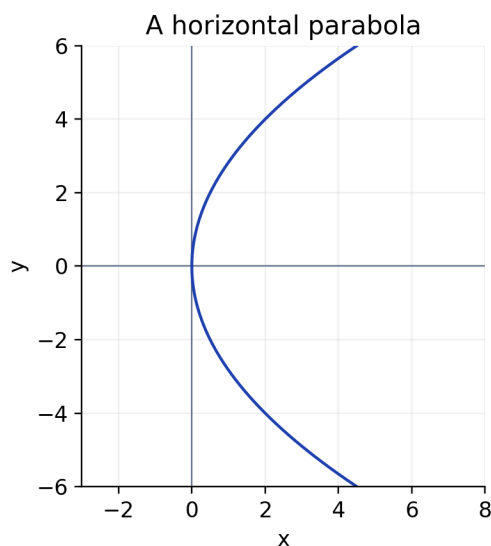


Lesson 5.1 · Practice

No calculator required | Name: _____

- Find the vertex, focus, and directrix of $y^2 = 8x$.



Compare the equation with $y^2 = 4px$.

- Find the center and radius of $x^2 + y^2 - 4x + 6y - 12 = 0$.

Lesson 5.1 · Practice

No calculator required | Name: _____

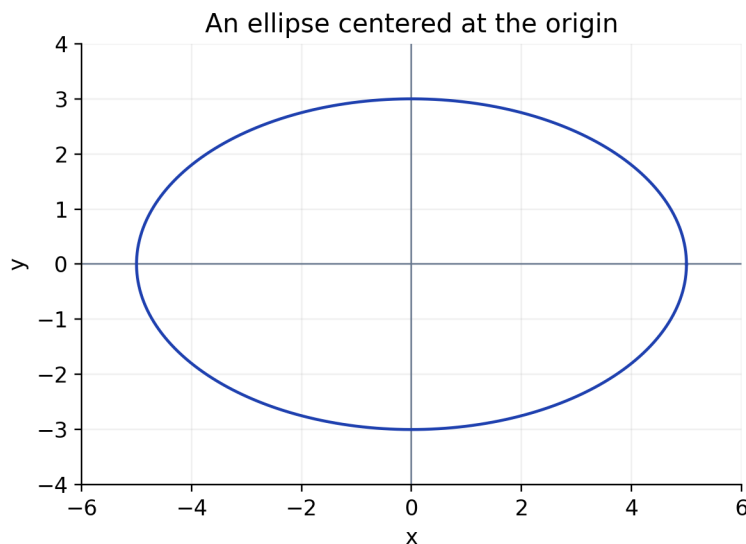
3. For $(x - 1)^2 = -12(y + 2)$, find the vertex, focus, and opening direction.

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Lesson 5.2 · Practice

No calculator required | Name: _____

4. Find the vertices, covertices, and foci of $x^2/25 + y^2/9 = 1$.



Read semiaxis lengths from the squared denominators.

5. Find the center and major-axis length of $(x - 2)^2/16 + (y + 1)^2/4 = 1$.

Lesson 5.2 · Practice

No calculator required | Name: _____

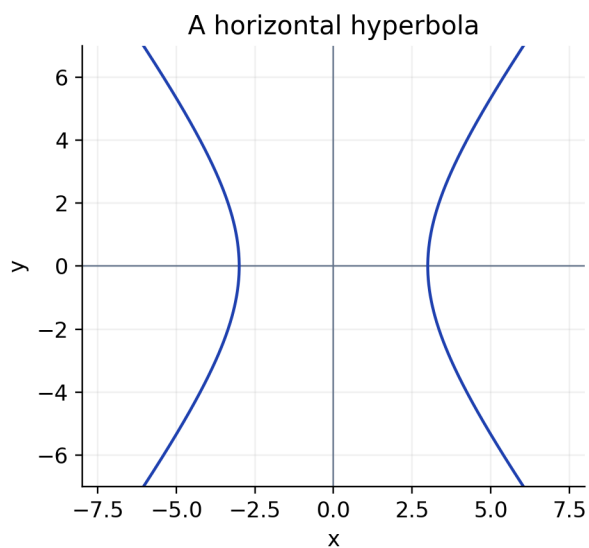
6. An origin-centered ellipse has horizontal vertices $(\pm 5, 0)$ and foci $(\pm 3, 0)$. Write its equation.

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Lesson 5.3 · Practice

No calculator required | Name: _____

7. Find vertices, foci, and asymptotes of $x^2/9 - y^2/16 = 1$.



Use the positive term to locate the transverse axis.

8. For $y^2/4 - x^2/9 = 1$, give the opening direction and asymptotes.

Lesson 5.3 · Practice

No calculator required | Name: _____

9. Find the center and vertices of $(x - 1)^2/4 - (y + 2)^2/9 = 1$.

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