

Score: 1 of 1 pt

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2.2.67

Determine the center and radius of the circle described by the equation.

$$(x+4)^2 + (y-2)^2 = 9$$

center = $(-4, 2)$ (Type your answer as an ordered pair.)

radius = 3

Score: 1 of 1 pt

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2.2.69

Specify the center and the radius of the circle below.

$$(x+4)^2 + (y+2)^2 = 29$$

What is the center of the circle?

$(-4, -2)$ (Type an ordered pair.)

What is the radius of the circle?

$\sqrt{29}$ (Simplify your answer. Type an exact answer, using radicals as needed.)



2.2.81

- a. Find the center and radius of the given circle.
b. Find the x- and y-intercepts of the graph of the given circle.

$$x^2 + y^2 + 4x - 6y + 4 = 0$$

The center is $(-2, 3)$.

(Type an ordered pair.)

The radius is 3 .

(Simplify your answer. Type an exact answer, using radicals as needed.)

Select the correct choice below and fill in any answer boxes within your choice.

- ☒ A. The x-intercept(s) is/are -2 .
(Use a comma to separate answers as needed. Type an exact answer, using radicals as needed.)
☐ B. There is no x-intercept.

Select the correct choice below and fill in any answer boxes within your choice.

- ☒ A. The y-intercept(s) is/are $3 \pm \sqrt{5}$.
(Use a comma to separate answers as needed. Type an exact answer, using radicals as needed.)
☐ B. There is no y-intercept.

✓ 10.2.7

Find the focus and directrix of the parabola with the given equation. Then match the equation to one of the graphs labeled A through D.

$$x^2 = 3y$$

$$\left(0, \frac{3}{4}\right)$$

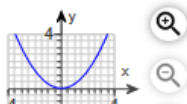
(Simplify your answer. Type an ordered pair. Use integers or fractions for any numbers in the expression.)

What is the directrix of the parabola?

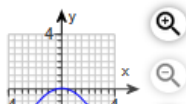
- ☐ A. $x = -\frac{3}{4}$
- ☒ B. $y =$
- ☐ C. $x = \frac{3}{4}$
- ☐ D. $y = \frac{3}{4}$

Match the given equation to one of the graphs below.

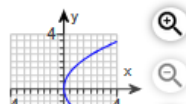
☒ A.



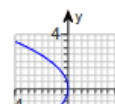
☐ B.



☐ C.



☐ D.



Score: 1 of 1 pt

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10.2.9

Find the focus and directrix of the parabola with the equation $5y^2 = -5x$. Then graph the parabola.

The focus is $\left(-\frac{1}{4}, 0\right)$.

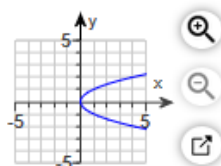
(Simplify your answer. Type an ordered pair. Type an integer or a fraction.)

The equation for the directrix is $x = \frac{1}{4}$.

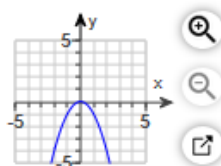
(Simplify your answer. Type an equation. Use integers or fractions for any numbers in the equation.)

Choose the correct graph for $5y^2 = -5x$ below.

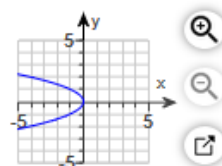
☐



☐



☒



10.2.11

Find the focus and directrix of the parabola with the given equation. Then match the equation to one of the graphs labeled A through D.

$$y^2 = -3x$$

$\left(-\frac{3}{4}, 0\right)$

(Simplify your answer. Type an ordered pair. Use integers or fractions for any numbers in the expression.)

What is the directrix of the parabola?

☐ A. $y = -\frac{3}{4}$

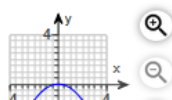
☐ B. $x = -\frac{3}{4}$

☒ C. $x = \frac{3}{4}$

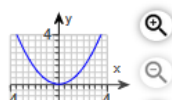
☐ D. $y =$

Match the given equation to one of the graphs below.

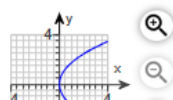
☐ A.



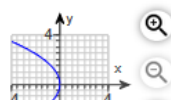
☐ B.



☐ C.



☒ D.



Score: 0 of 1 pt



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✖ 10.2.27

Find the standard equation of the parabola that satisfies the given conditions. Also find the length of the latus rectum of the parabola.

Vertex: $(6, 6)$; directrix: $y = -3$

The standard equation of the parabola that satisfies the given conditions is $(x - 6)^2 = 36(y - 6)$.

(Type an equation. Type your answer in standard form. Simplify your answer.)

The length of the latus rectum is 36 .

(Simplify your answer.)

Score: 0 of 1 pt



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✖ 10.2.29

Find the equation of the parabola described. Find the two points that define the latus rectum, and graph the equation.

Vertex at $(4, 5)$; focus at $(5, 5)$

Choose the correct equation of the parabola below.

☐ A. $(x + 4)^2 = -4(y - 5)$

☐ C. $(x - 4)^2 = 4(y + 5)$

☐ E. $(x + 4)^2 = -4(y + 5)$

☒ G. $(y - 5)^2 = 4(x - 4)$

☐ B. $(x - 4)^2 = 4(y - 5)$

☐ D. $(y + 5)^2 = -4(x - 4)$

☐ F. $(y - 5)^2 = 4(x + 4)$

☐ H. $(y + 5)^2 = -4(x + 4)$

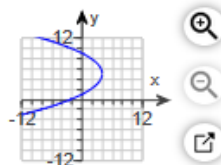
What are the coordinates of the two points that define the latus rectum?

$(5, 3), (5, 7)$

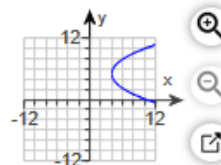
(Type an ordered pair. Use a comma to separate answers as needed.)

Choose the correct graph of the equation of the parabola below.

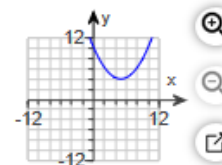
☐ A.



☒ B.



☐ C.



Score: 0 of 1 pt

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Test Score: 28.5

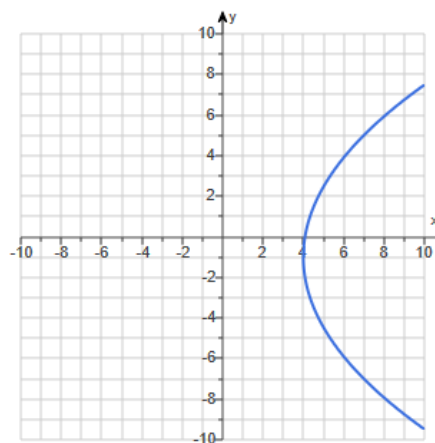
✖ 10.2.41

Find the vertex, focus, and directrix of the parabola. Then graph the parabola.

$$(y + 1)^2 = 12(x - 4)$$

The vertex of the parabola is $(4, -1)$.
(Type an ordered pair.)The focus of the parabola is $(7, -1)$.
(Type an ordered pair.)The directrix of the parabola is $x = 1$.
(Type an equation. Simplify your answer.)

Use the graphing tool to graph the parabola only.



Score: 0 of 1 pt

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Test Score: 28.57

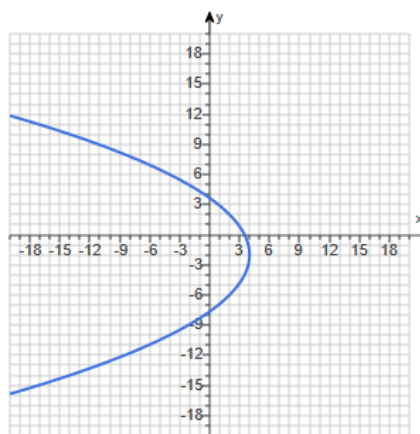
✖ 10.2.45

Find the vertex, focus, and directrix of the parabola with the given equation. Then graph the parabola.

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

The vertex of the parabola is $(4, -2)$. (Type an ordered pair.)The focus of the parabola is $(2, -2)$.
(Type an ordered pair.)The directrix of the parabola is $x = 6$. (Type an equation. Simplify your answer.)

Use the graphing tool to graph the parabola.



Score: 0 of 1 pt

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Test Score: 28.57%, 6 o

✖ 10.3.7

Find the vertices and foci for the ellipse. Graph the equation.

$$\frac{x^2}{81} + \frac{y^2}{64} = 1$$

What are the coordinates of the vertices?

(9,0),(-9,0)

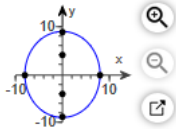
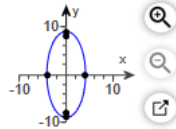
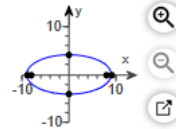
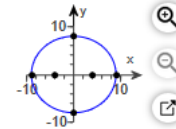
(Type an ordered pair. Type exact answers for each coordinate, using radicals as needed. Use a comma to separate answers as needed.)

What are the coordinates of the foci?

(\sqrt{17},0),(-\sqrt{17},0)

(Type an ordered pair. Type exact answers for each coordinate, using radicals as needed. Use a comma to separate answers as needed.)

Which graph shown below is the graph of the ellipse?

☐ A.☐ B.☐ C.☒ D.

Score: 0 of 1 pt

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Test Score: 28.57%

✖ 10.3.9

Identify the vertices and foci of the following ellipse. Graph the ellipse.

$$\frac{x^2}{49} + y^2 = 1$$

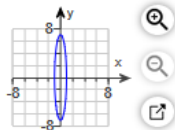
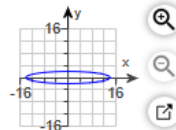
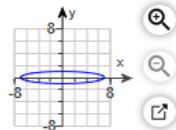
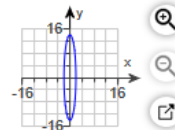
The vertices of the given ellipse are (7,0),(-7,0).

(Simplify your answer. Type an ordered pair. Type exact answers for each coordinate, using radicals as needed. Use a comma to separate answers as ne

The foci of the given ellipse are (4\sqrt{3},0),(-4\sqrt{3},0).

(Simplify your answer. Type an ordered pair. Type exact answers for each coordinate, using radicals as needed. Use a comma to separate answers as ne

Choose the correct graph below.

☐ A.☐ B.☒ C.☐ D.

Score: 0 of 1 pt

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Test Score: 28.57%, 6

✖ 10.3.13

Find the vertices and the foci of the ellipse with the given equation. Then draw its graph.

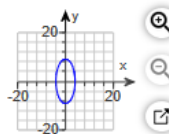
$$\frac{x^2}{4} + \frac{y^2}{9} = 1$$

What are the vertices of the ellipse? $(0, -3), (0, 3)$
(Use a comma to separate answers. Type an ordered pair.)

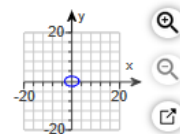
What are the foci of the ellipse? $(0, -\sqrt{5}), (0, \sqrt{5})$
(Use a comma to separate answers. Type an ordered pair. Type an exact answer.)

Choose the correct graph of the ellipse.

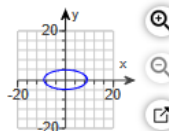
○ A.



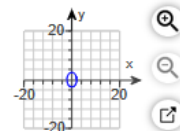
○ B.



○ C.



★ D.



Score: 0 of 1 pt

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Test Score: 28.57%, 6

✖ 10.3.15

Find the vertices and foci of the ellipse. Graph the equation.

$$x^2 + y^2 = 49$$

What are the coordinates of the vertices?

$(7, 0), (-7, 0), (0, -7), (0, 7)$

(Type an ordered pair. Use a comma to separate answers as needed.)

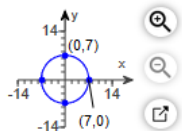
What are the coordinates of the foci?

$(0, 0)$

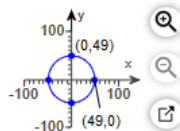
(Type exact answers for each coordinate, using radicals as needed. Type an ordered pair. Use a comma to separate answers as needed.)

Choose the correct graph below.

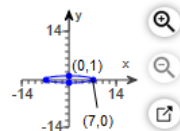
★ A.



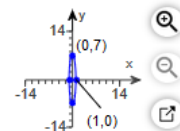
○ B.



○ C.



○ D.



Score: 0 of 1 pt

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Test Score: 28.57%, 6 of 2

10.3.17

Identify the vertices and foci of the following ellipse. Graph the ellipse.

$$x^2 + 36y^2 = 36$$

The vertices of the given ellipse are $(6, 0), (-6, 0)$.

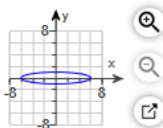
(Simplify your answer. Type an ordered pair. Type exact answers for each coordinate, using radicals as needed. Use a comma to separate answers as needed.)

The foci of the given ellipse are $(\sqrt{35}, 0), (-\sqrt{35}, 0)$.

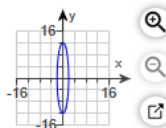
(Simplify your answer. Type an ordered pair. Type exact answers for each coordinate, using radicals as needed. Use a comma to separate answers as needed.)

Choose the correct graph below.

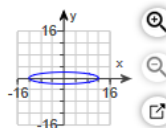
☒ A.



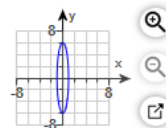
☐ B.



☐ C.



☐ D.



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Test Score: 28.57%, 6

10.3.31

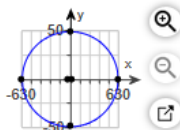
Find the standard form of the equation for the ellipse with foci $(\pm 24, 0)$, and y-intercepts ± 7 . Graph the equation.

The equation of the ellipse in the standard form is $\frac{x^2}{625} + \frac{y^2}{49} = 1$.

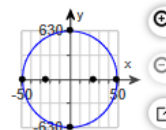
(Type exact answers, using radicals as needed. Use integers or fractions for any numbers in the equation.)

Choose the correct graph below.

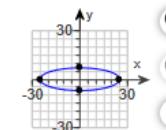
☐ A.



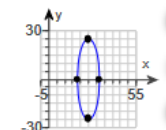
☐ B.



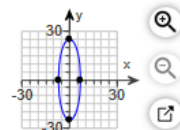
☒ C.



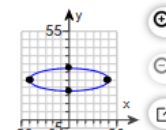
☐ D.



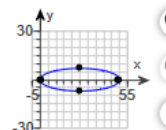
☐ E.



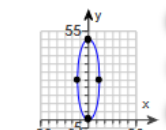
☐ F.



☐ G.



☐ H.



Score: 0 of 1 pt

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Test Score: 28.57%, 6 of 21 pt

✖ 10.3.33



Find the equation of the ellipse, satisfying the conditions. Sketch its graph.

foci $(\pm 5, 0)$, and x-intercepts $(\pm 9, 0)$

Choose the correct equation of the ellipse.

☐ A.

$$\frac{x^2}{81} + \frac{y^2}{106} = 1$$

☐ B.

$$\frac{x^2}{106} + \frac{y^2}{81} = 1$$

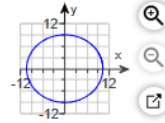
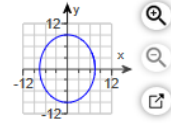
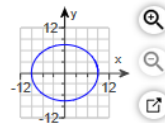
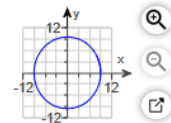
☐ C.

$$\frac{x^2}{56} + \frac{y^2}{81} = 1$$

☒ D.

$$\frac{x^2}{81} + \frac{y^2}{56} = 1$$

Choose the correct graph of the ellipse.

☐ A.☐ B.☒ C.☐ D.

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Score: 0 of 1 pt

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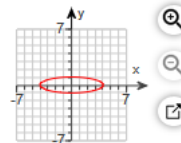
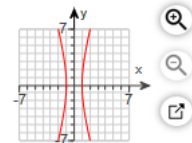
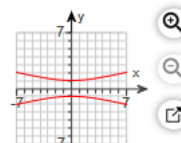
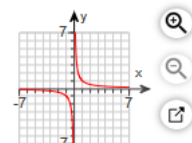
Test Score: 28.57%, 6 of 21 pt

✖ 10.4.9

Graph the hyperbola on paper and then choose the correct graph.

$$\frac{y^2}{1} - \frac{x^2}{16} = 1$$

Choose the correct graph on the right.

☐ A.☐ B.☒ C.☐ D.

Score: 0 of 1 pt

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Test Score: 28.57%, 6 of 21

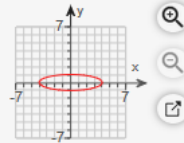
✖ 10.4.9

Graph the hyperbola on paper and then choose the correct graph.

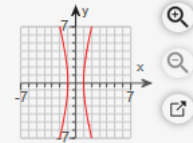
$$\frac{y^2}{1} - \frac{x^2}{16} = 1$$

Choose the correct graph on the right.

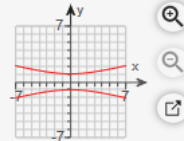
☐ A.



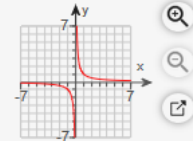
☐ B.



☒ C.



☐ D.



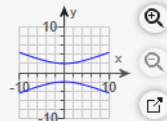
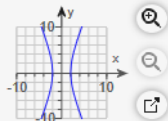
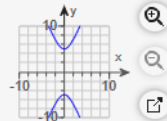
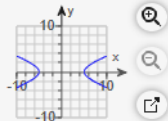
Score: 0 of 1 pt

21 of 21 ▼

Test Score: 28.57%, 6 of 21

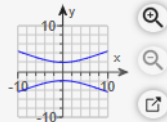
✖ 10.4.11

Match the equation $25x^2 - 4y^2 = 100$ with one of the following graphs.

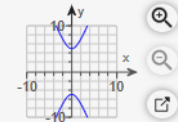


Choose the correct graph below.

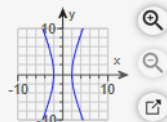
☐ A.



☐ B.



☒ C.



☐ D.

