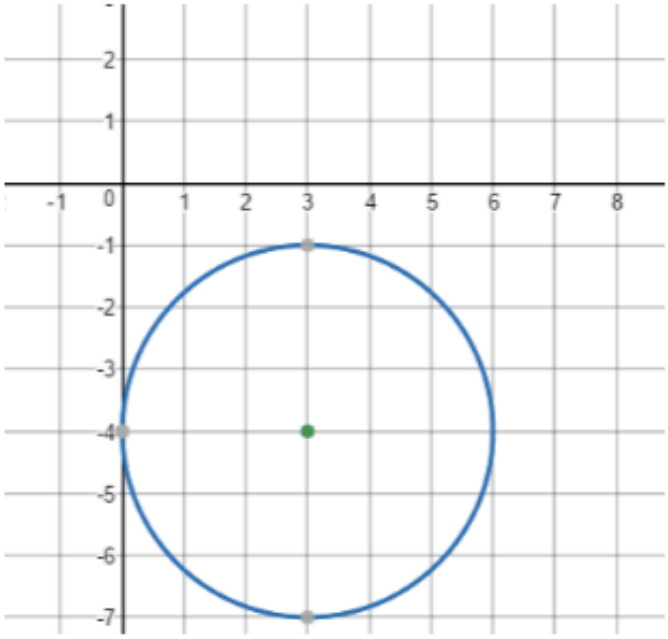
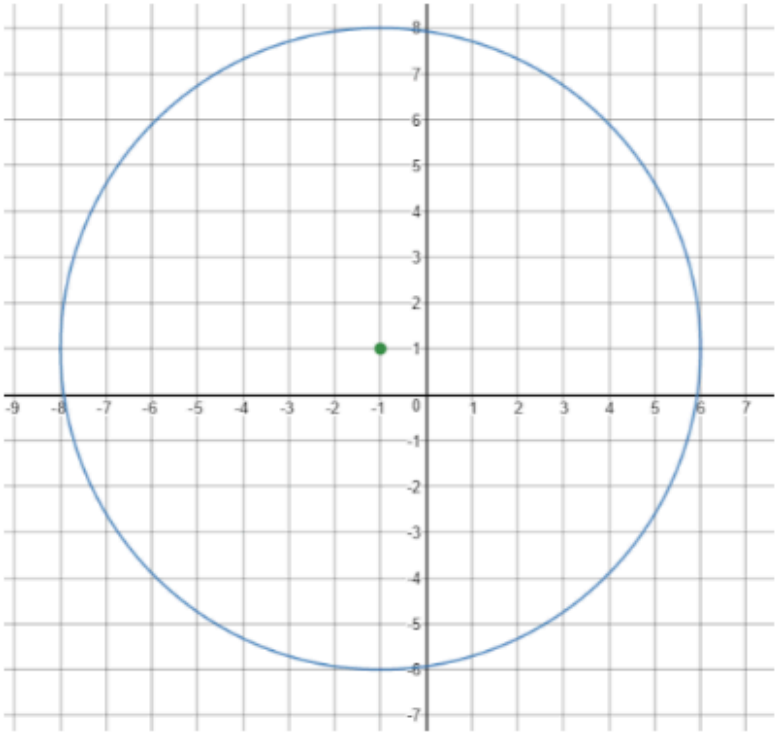
1.) What is the equation of the circle shown in the graph? *



- A.) $(x + 1)^2 + (y - 1)^2 = 7$
- B.) $(x + 1)^2 + (y - 1)^2 = \sqrt{7}$
- C.) $(x + 1)^2 + (y - 1)^2 = 7^2$
- D.) $(x - 1)^2 + (y + 1)^2 = 7$

2.) What is the equation of the circle shown in the graph? *



- A.) $(x + 1)^2 + (y - 1)^2 = 7$
- B.) $(x + 1)^2 + (y - 1)^2 = \sqrt{7}$
- C.) $(x + 1)^2 + (y - 1)^2 = 7^2$
- D.) $(x - 1)^2 + (y + 1)^2 = 7$

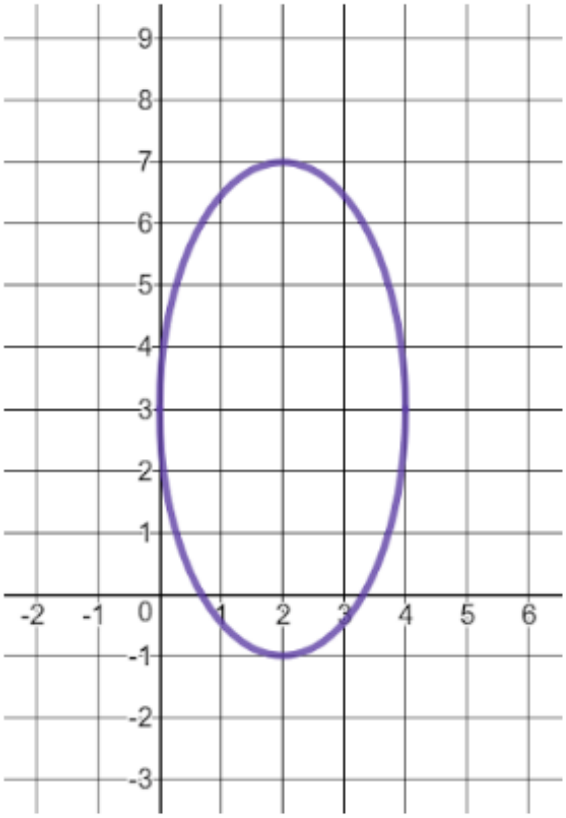
3.) What are the coordinates of the center and the radius of the circle with equation: $(x - 4)^2 + (y - 3)^2 = 5^2$ *

- A.) Center (-4, -3), Radius = 5 units
- B.) Center (-4, -3), Radius = 25 units
- C.) Center (4, 3), Radius = 25 units
- D.) Center (4, 3), Radius = 5 units

4.) Determine the equation of a circle with center (0, 8) and radius 4. *

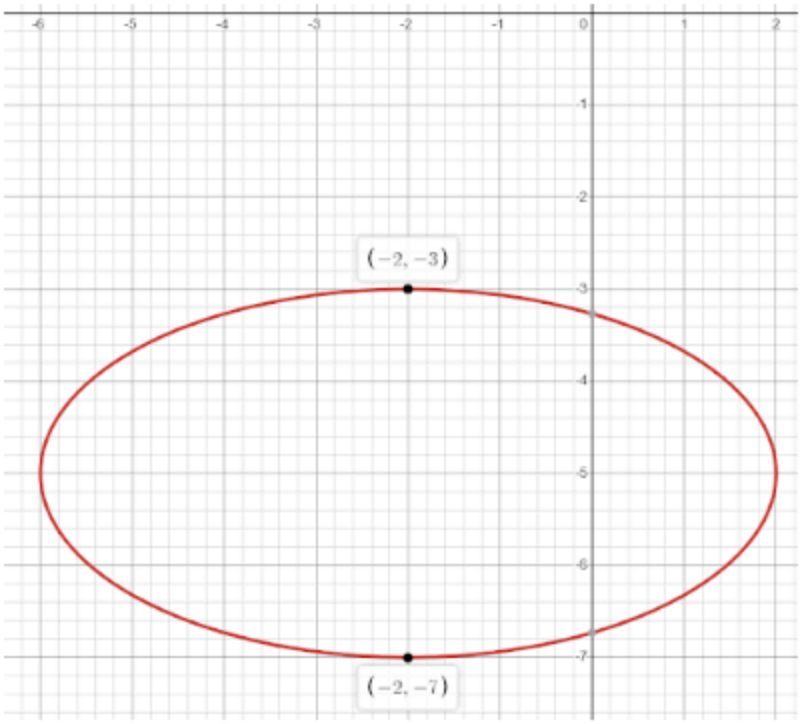
- A.) $x^2 + (y - 8)^2 = 4^2$
- B.) $x^2 + (y - 8)^2 = 4$
- C.) $(x - 8)^2 + y^2 = 4$
- D.) $x^2 + (y + 8)^2 = 4^2$

5.) What is the equation of the ellipse shown in the graph? *



- A.) $\frac{(x-2)^2}{4} + \frac{(y-3)^2}{16} = 1$
- B.) $\frac{(x-2)^2}{2} + \frac{(y-3)^2}{4} = 1$
- C.) $\frac{(x-2)^2}{16} + \frac{(y-3)^2}{4} = 1$
- D.) $\frac{(x+2)^2}{4} + \frac{(y+3)^2}{16} = 1$

6.) What is the equation of the ellipse shown in the graph? *



A.)

$$\frac{(x+2)^2}{16} + \frac{(y-5)^2}{4} = 1$$

B.)

$$\frac{(x-2)^2}{16} + \frac{(y+5)^2}{4} = 1$$

C.)

$$\frac{(x+2)^2}{16} + \frac{(y+5)^2}{4} = 1$$

D.)

$$\frac{(x+2)^2}{4} + \frac{(y+5)^2}{16} = 1$$

7.) The vertices of an ellipse are located at (-3, -1) & (5, -1). What is the equation of the ellipse if the length of the minor axis is 4? *

A.)

$$\frac{(x-1)^2}{16} + \frac{(y+1)^2}{4} =$$

B.)

$$\frac{(x+1)^2}{16} + \frac{(y-1)^2}{4} = 1$$

C.)

$$\frac{(x-1)^2}{16} + \frac{(y-1)^2}{4} = 1$$

D.)

$$\frac{(x-4)^2}{25} + \frac{(y-1)^2}{9} = 1$$

8.) Find the equation of the ellipse with center at (2, -1), a horizontal major axis of length 10, and a vertical minor axis of length 8. *

A.)

$$\frac{(x-2)^2}{25} + \frac{(y+1)^2}{16} = 1$$

B.)

$$\frac{(x-2)^2}{25} - \frac{(y+1)^2}{16}$$

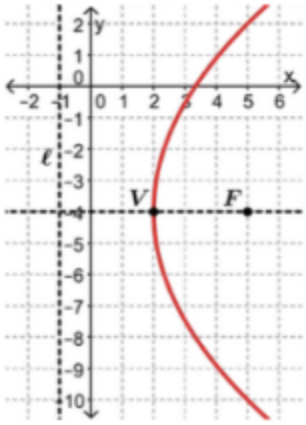
C.)

$$\frac{(x+2)^2}{25} + \frac{(y-1)^2}{16} = 1$$

D.)

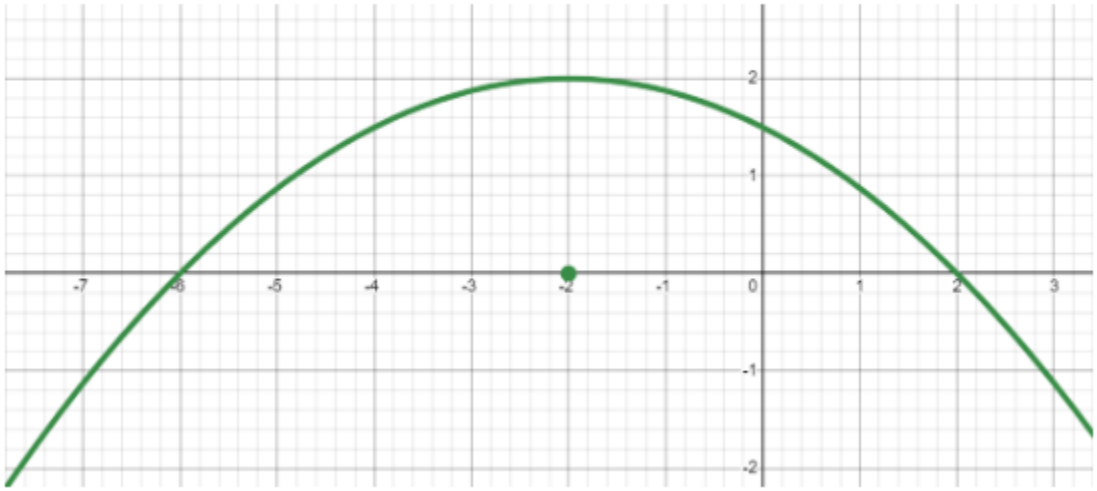
$$\frac{(x-2)^2}{16} + \frac{(y+1)^2}{25} = 1$$

9.) What is the equation of the parabola shown in the graph? *



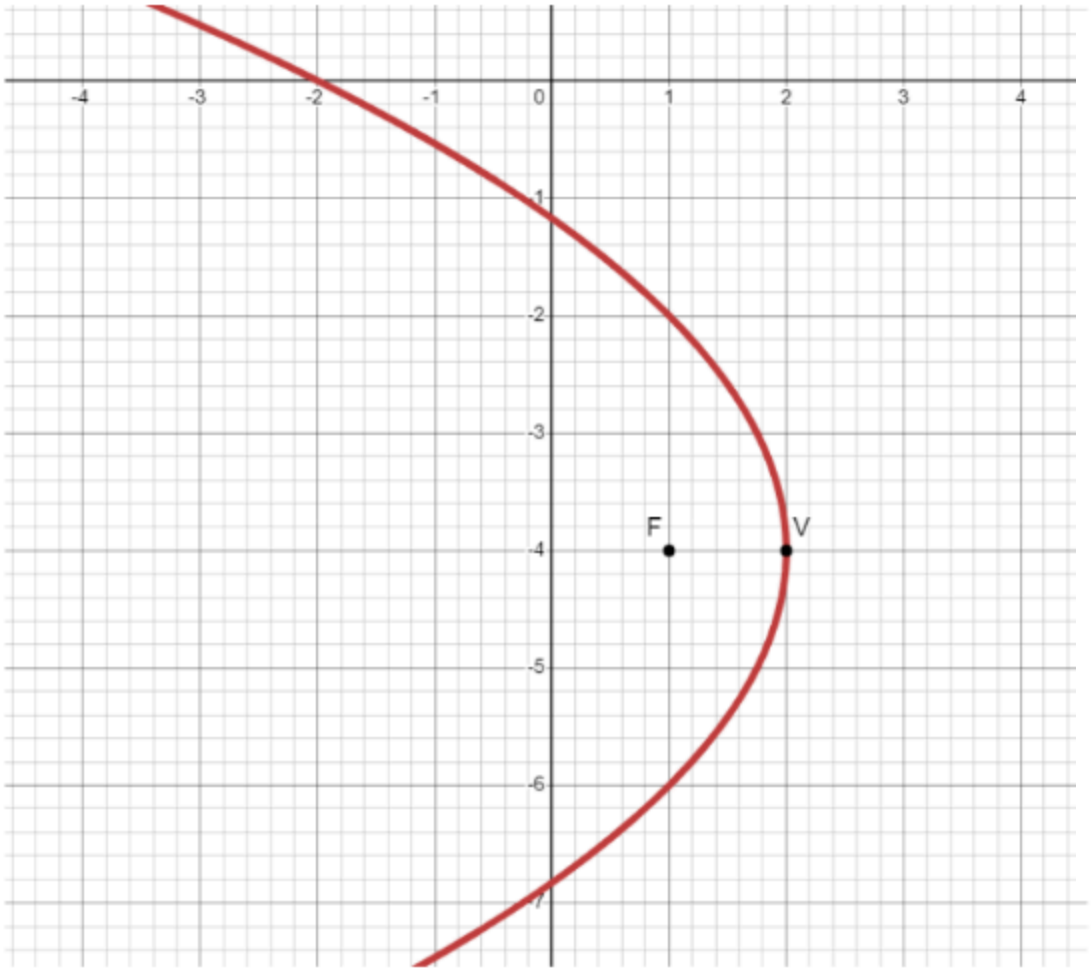
- A.) $(y - 4)^2 = 12(x + 2)$
- B.) $(y + 4)^2 = -12(x - 2)$
- C.) $(y - 4)^2 = -12(x - 2)$
- D.) $(y + 4)^2 = 12(x - 2)$

10.) What is the equation of the parabola shown in the graph? *



- A.) $\frac{(x-2)^2}{4(2)} = (y+2)$
- B.) $\frac{(x+2)^2}{4(-2)} = (y-2)$
- C.) $\frac{(x-2)^2}{4(-2)} = (y+2)$
- D.) $\frac{(x+2)^2}{4(2)} = (y-2)$

11.) What is the equation of the parabola shown in the graph? *



A.)

$$\frac{(y+4)^2}{4} = (x-2)$$

B.)

$$\frac{(y+4)^2}{-4} = (x-2)$$

C.)

$$\frac{(y+4)^2}{-1} = (x-2)$$

D.)

$$\frac{(y+4)^2}{1} = (x-2)$$

12.) Find the vertex and focus of the parabola. *

$$\frac{(y-2)^2}{4(-4)} = (x-3)$$

A.) Vertex: (-3, -2) Focus: (-3, 14)

B.) Vertex: (-3, -2) Focus: (-3, 18)

C.) Vertex: (3, 2) Focus: (7, 2)

D.) Vertex: (3, 2) Focus: (-1, 2)

13.) Find the standard form of the equation of the parabola with the given focus (0, 7) and vertex at the origin (0, 0).

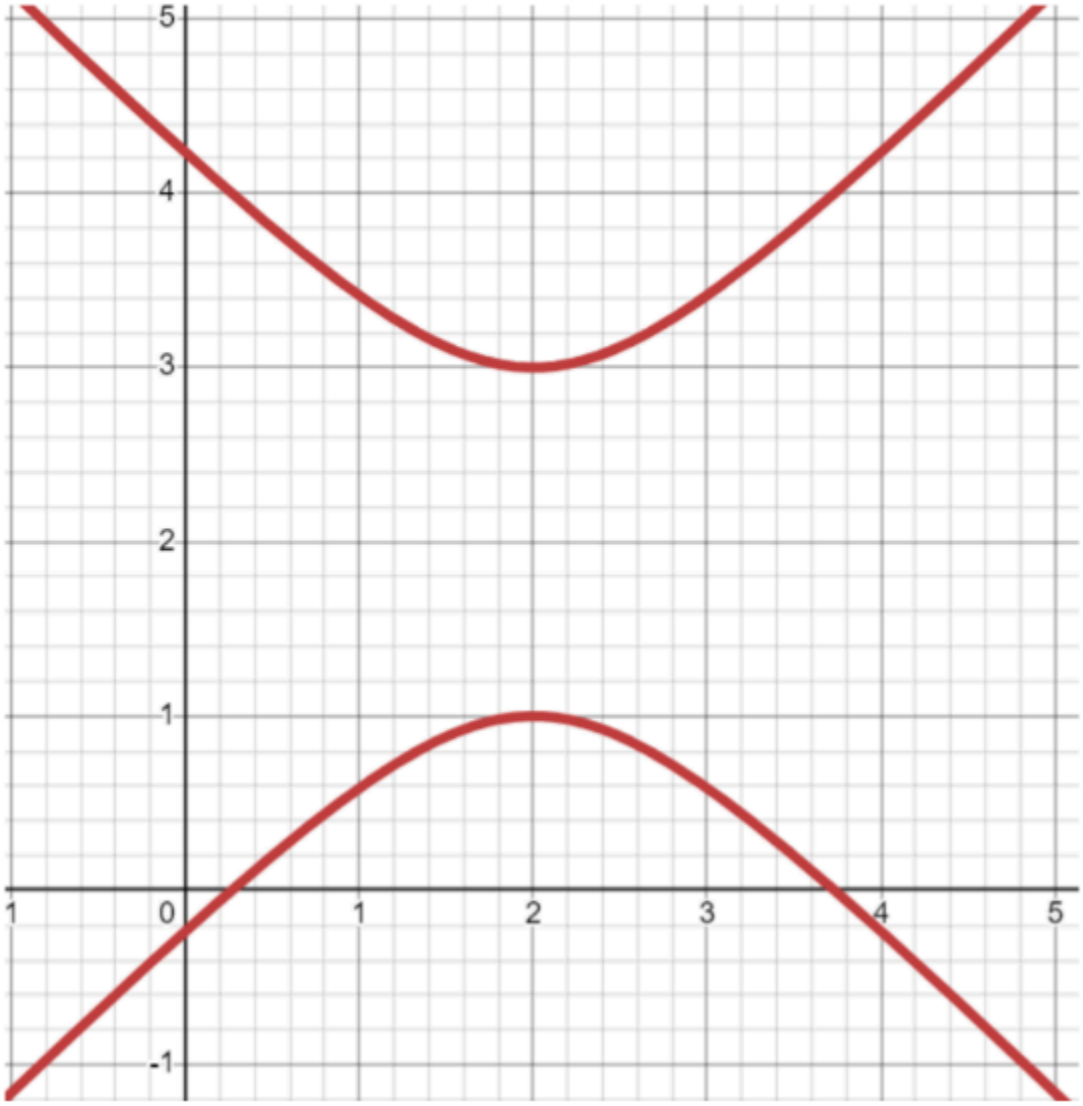
A.) $\frac{x^2}{4(7)} = y$

B.) $\frac{x^2}{7} = y$

C.) $\frac{x^2}{77} = -y$

D.) $\frac{y^2}{4(7)} = x$

14.) What is the equation of the hyperbola shown in the graph? *



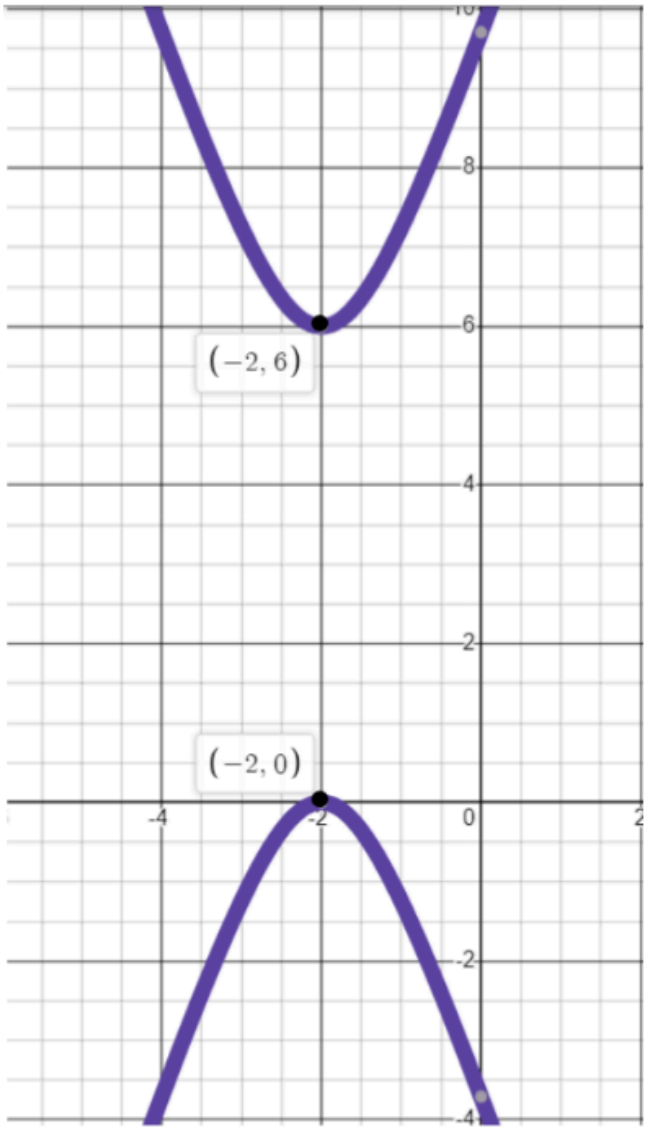
A.) $\frac{(y-2)^2}{1} - \frac{(x-2)^2}{1} = 1$

B.) $\frac{(y+2)^2}{1} - \frac{(x+2)^2}{1} = 1$

C.) $\frac{(x-2)^2}{1} - \frac{(y-2)^2}{1} = 1$

D.) $\frac{(x+2)^2}{1} - \frac{(y+2)^2}{1} = 1$

15.) What is the equation of the hyperbola shown in the graph? *



A.)

$$\frac{(y-3)^2}{1} - \frac{(x+2)^2}{1} = 1$$

B.)

$$\frac{(y-3)^2}{4} - \frac{(x+2)^2}{1} = 1$$

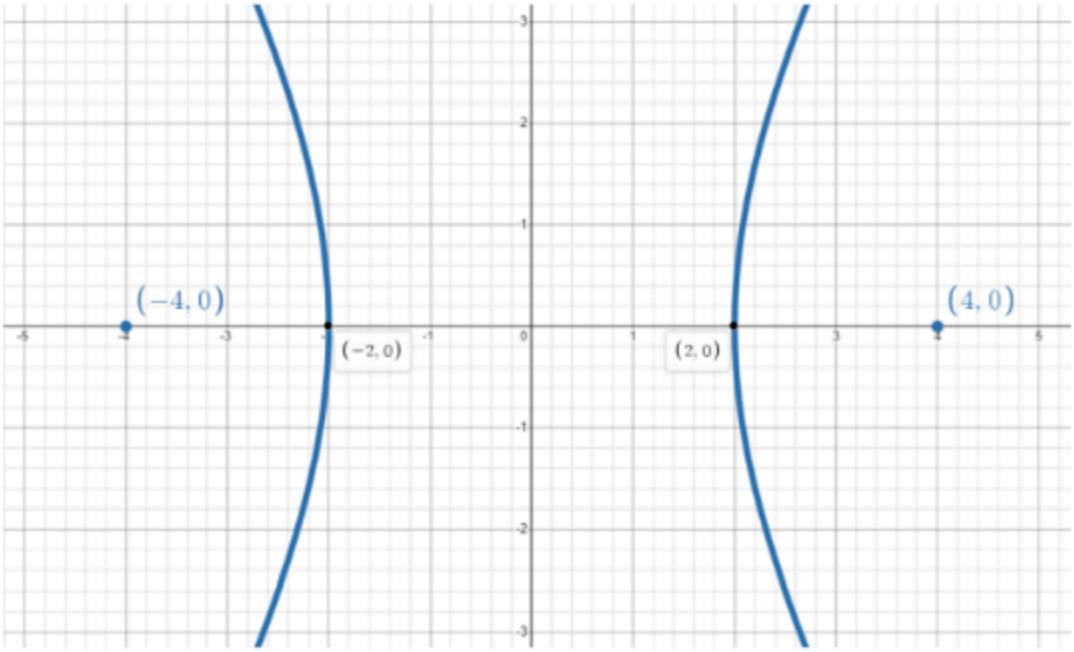
C.)

$$\frac{(y-3)^2}{6} - \frac{(x+2)^2}{1} = 1$$

D.)

$$\frac{(y-3)^2}{9} - \frac{(x+2)^2}{1} = 1$$

16.) What is the equation of the hyperbola shown in the graph? *



A.)

$$\frac{(x)^2}{12} - \frac{(y)^2}{4} = 1$$

B.)

$$\frac{(x)^2}{4} - \frac{(y)^2}{12} = 1$$

C.)

$$\frac{(y)^2}{12} - \frac{(x)^2}{4} = 1$$

D.)

$$\frac{(y)^2}{4} - \frac{(x)^2}{12} = 1$$

17.) Determine the equation of the hyperbola with vertices at (0, ±5) and foci at (0, ±7) *

A.)

$$\frac{x^2}{25} - \frac{y^2}{24} = 1$$

B.)

$$\frac{y^2}{25} - \frac{x^2}{24} = 1$$

C.)

$$\frac{y^2}{24} - \frac{x^2}{25} = 1$$

D.)

$$\frac{y^2}{25} - \frac{x^2}{1} = 1$$

18.) What is the center of the hyperbola? *

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

- A.) (-1, 4)
- B.) (-1, -4)
- C.) (1, -4)
- D.) (1, 4)