

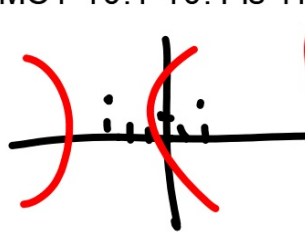
Precalc

Review 10.1-10.4

Quiz 10.3-10.4

$$\frac{c}{a} = \frac{5}{4} = \frac{5}{2}$$

MCT 10.1-10.4 is Thurs.


$$\frac{(x+3)^2}{16} - \frac{(y-1)^2}{9} = 1$$

For the equation of each ellipse, find the coordinates of the center, foci, and vertices.
Then graph the equation.

20. $\frac{(x-5)^2}{16} + \frac{(y-2)^2}{36} = 1$

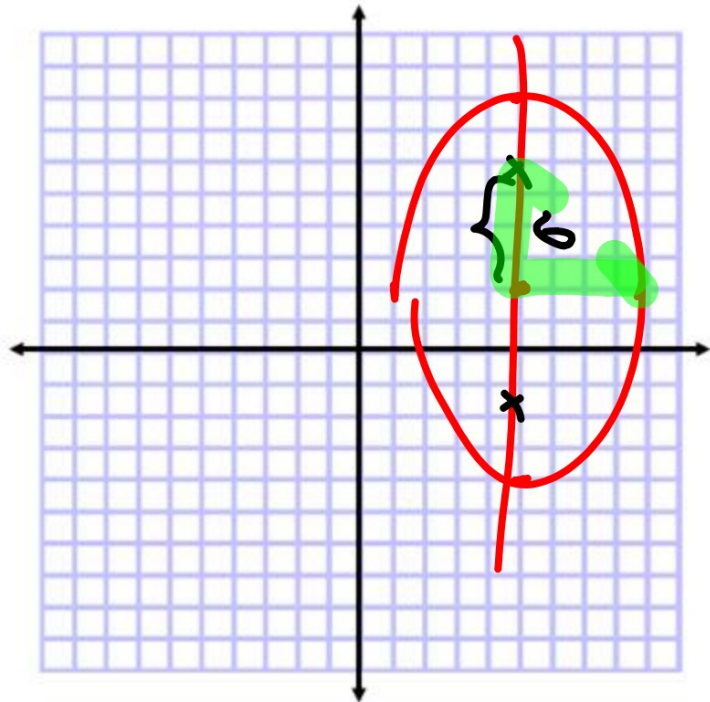
$a=4$ $b=6$

$c^2 + b^2 = a^2$

$c^2 = 20$

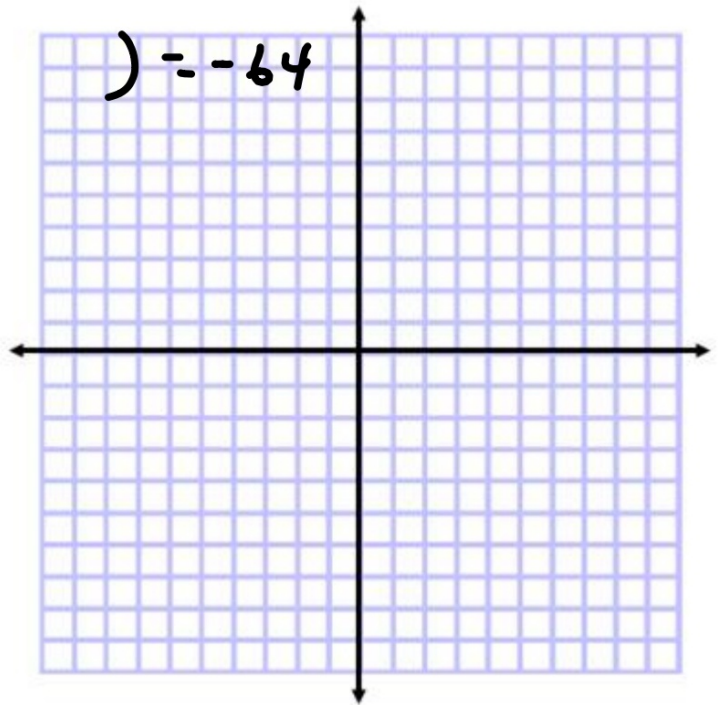
$c = 2\sqrt{5}$

$F(5, 2 \pm 2\sqrt{5})$



$$22. 6x^2 + 4y^2 + 24x - 32y + 64 = 0$$

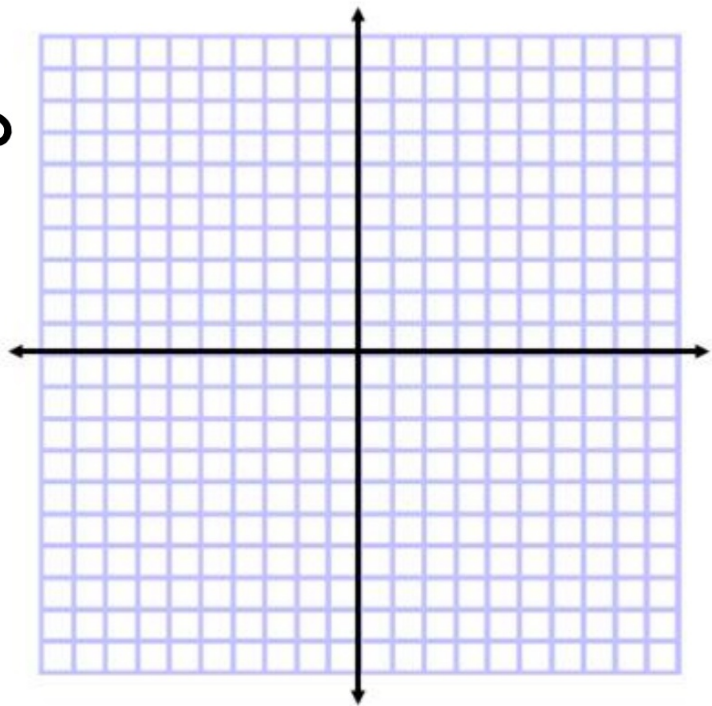
$$6(x^2 + 6x) + 4(y^2 - 8y) = -64$$



$$18. \frac{3x^2}{3} + \frac{3y^2}{3} + \frac{6x}{3} + \frac{12y}{3} - \frac{60}{3} = 0$$

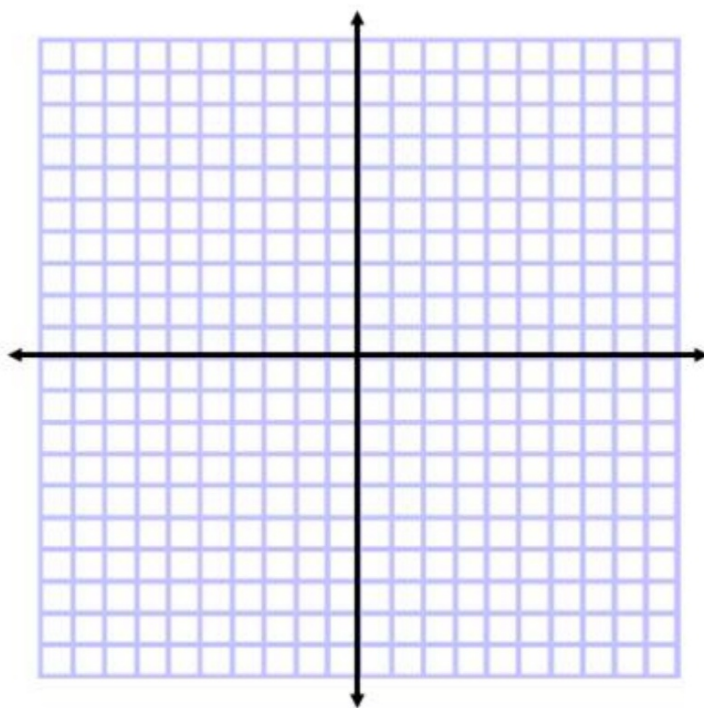
$$x^2 + y^2 + 2x + 4y - 20 = 0$$

$$x^2 + y^2 + 2x + 4y = 20$$

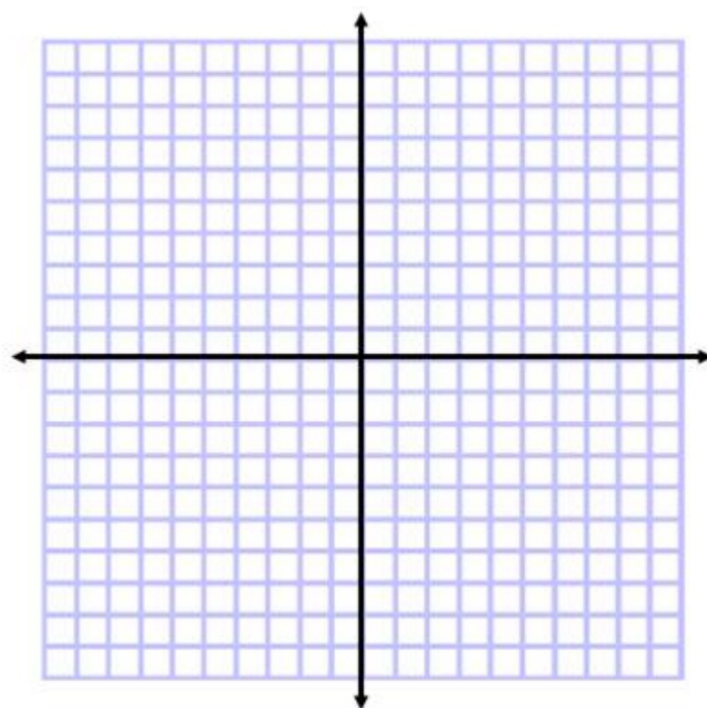


For the equation of each hyperbola, find the coordinates of the center, the foci, and the vertices and the equations of the asymptotes of its graph. Then graph the equation.

25. $\frac{x^2}{25} - \frac{y^2}{16} = 1$



28. $9x^2 - 16y^2 - 36x - 96y + 36 = 0$

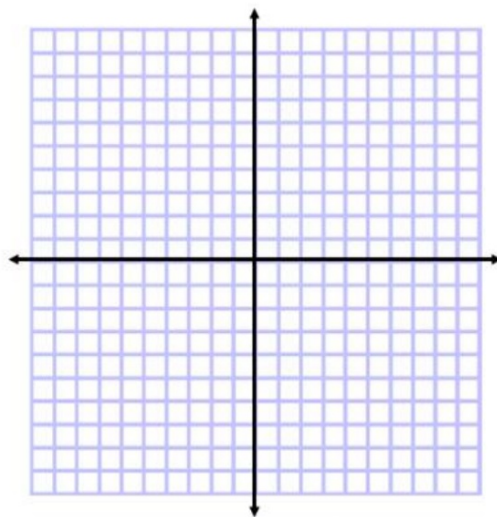


REVIEW EXERCISES

Find the distance between each pair of points with the given coordinates. Then, find the midpoint of the segment that has endpoints at the given coordinates.

11. $(1, -6), (-3, -4)$

12. $(a, b), (a + 3, b + 4)$

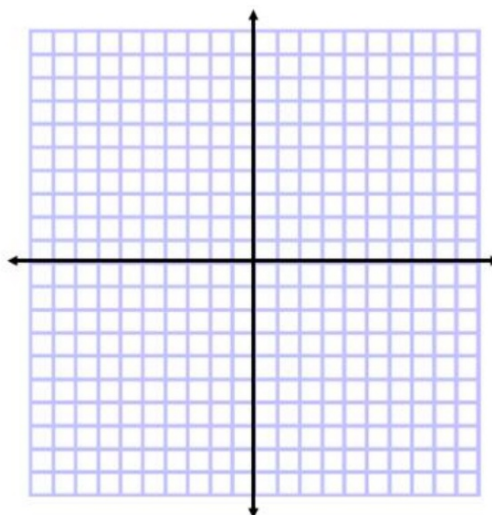


Write the standard form of the equation of each circle described. Then graph the equation.

14. center at $(0, 0)$, radius $3\sqrt{3}$

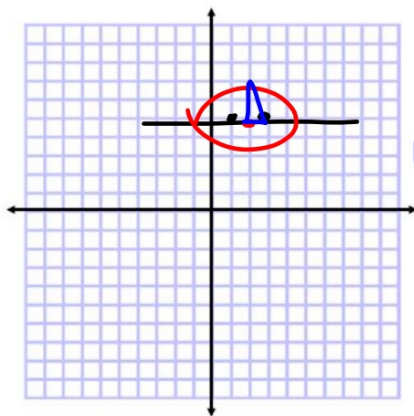
$$x^2 + y^2 = 27$$

$$3\sqrt{3} \cdot 3\sqrt{3} = \sqrt{9}$$

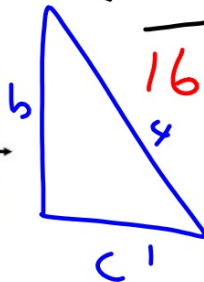


$$F(3,5) (1,5)$$

$$e = 0.25 = \frac{1}{4} = \frac{c}{a} = \frac{1}{a} = \frac{1}{4}$$



$$(x-2)^2 + (y-5)^2 = 1$$



$$b^2 + 1 = 16$$

$$b^2 = 15$$

$$\begin{array}{r} 56R \\ 11-310 \\ + ? \\ \hline p688 \end{array}$$