

Section 10 - 3B: The Ellipse

Name _____

Find the center of the ellipse and the value of a and b.

1. $\frac{x^2}{81} + \frac{y^2}{100} = 1$

Center: _____

a = _____ b = _____

2. $\frac{(x-2)^2}{25} + \frac{(y+3)^2}{49} = 1$

Center: _____

a = _____ b = _____

3. $\frac{(x+7)^2}{4} + \frac{y^2}{25} = 1$

Center: _____

a = _____ b = _____

4. $\frac{x^2}{64} + \frac{(y-6)^2}{16} = 1$

Center: _____

a = _____ b = _____

5. $4(x+1)^2 + 9(y-6)^2 = 36$

Center: _____

a = _____ b = _____

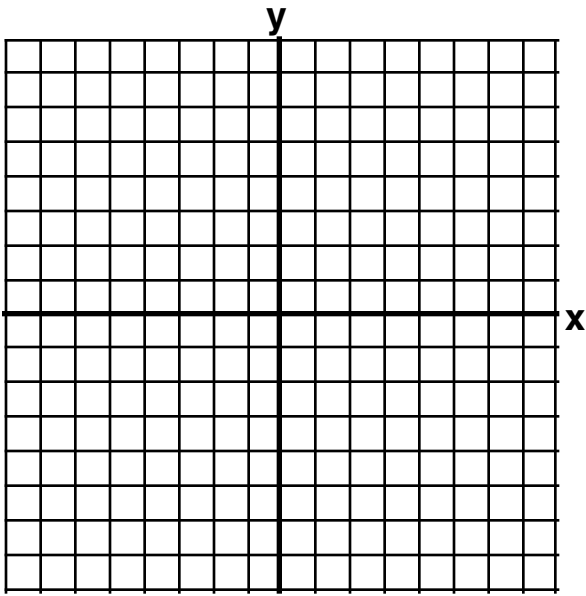
6. $25(x-1)^2 + 4(y+3)^2 = 100$

Center: _____

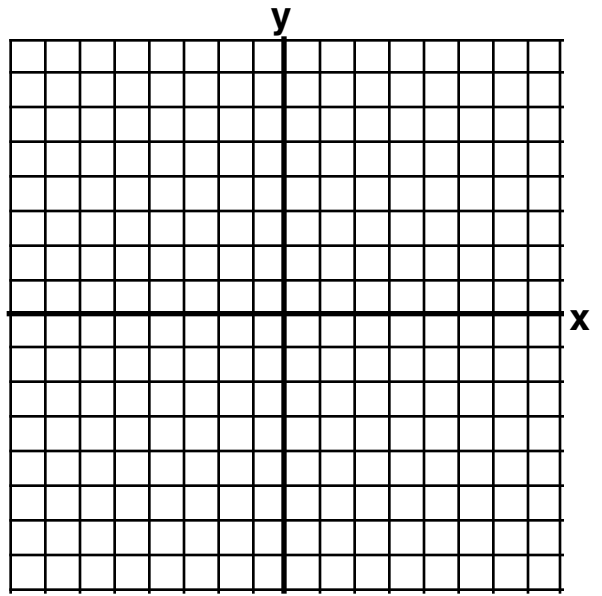
a = _____ b = _____

Graph each relation.

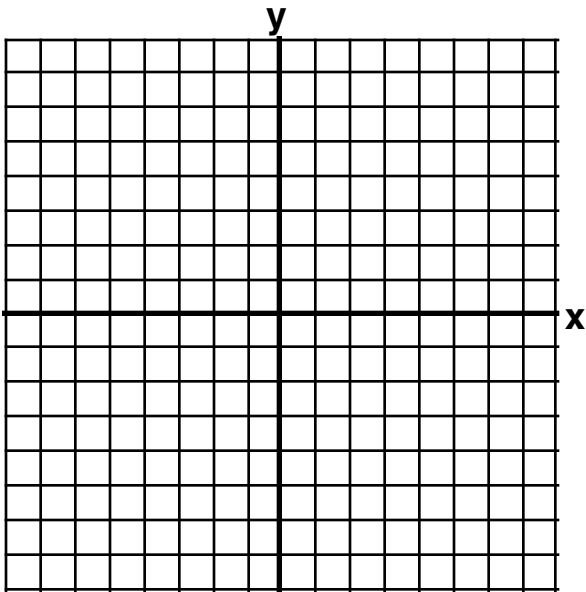
7. $\frac{x^2}{25} + \frac{y^2}{16} = 1$



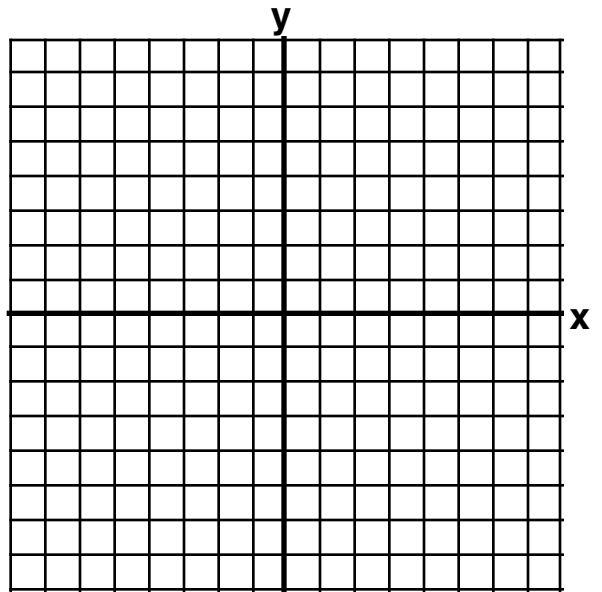
8. $\frac{x^2}{9} + \frac{y^2}{36} = 1$



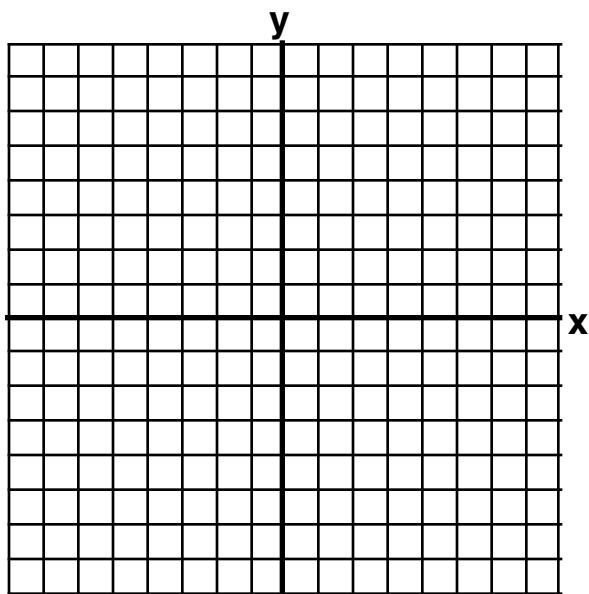
9. $\frac{(x-1)^2}{49} + \frac{y^2}{16} = 1$



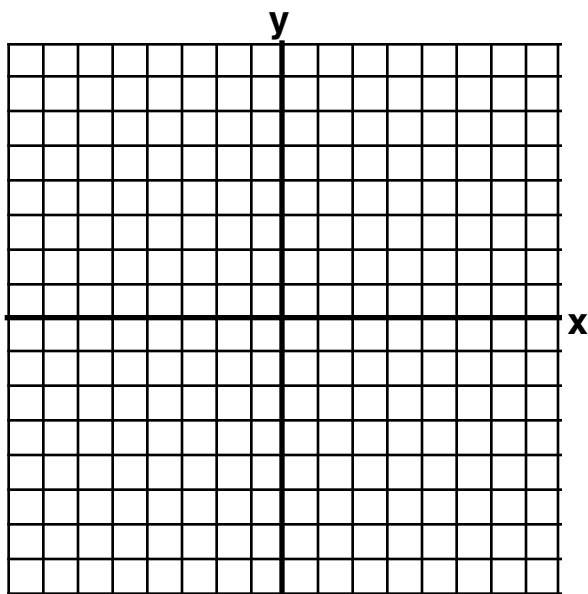
10. $\frac{x^2}{25} + \frac{(y-3)^2}{4} = 1$



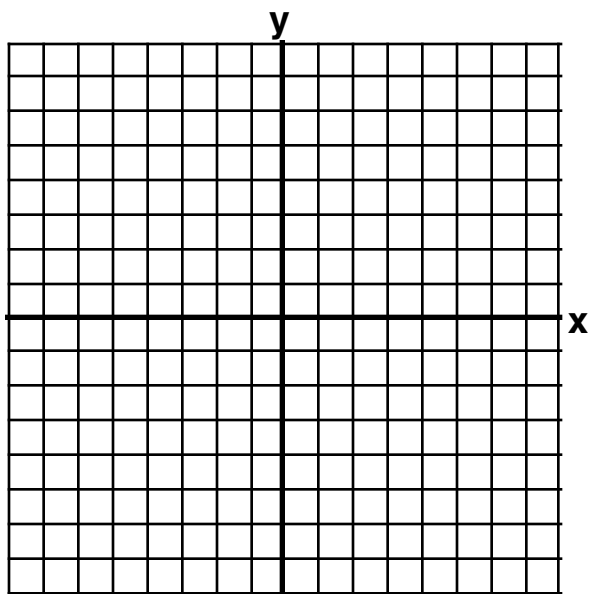
$$11. \frac{(x+2)^2}{16} + \frac{(y+4)^2}{9} = 1$$



$$12. \frac{(x-2)^2}{36} + \frac{(y+3)^2}{25} = 1$$



$$13. 9(x-2)^2 + 16y^2 = 144$$



$$14. 25(x+1)^2 + 4(y-3)^2 = 100$$

