

Student: _____
Date: _____
Time: _____

Instructor: Fred Khoury
Course: Math 2312-1000 Precalculus (Fall - 2015)
Book: Lial: College Algebra and Trigonometry, 4e

Assignment: Quiz Sec 4.6

1. Find the intercepts of the ellipse defined by the following equation.

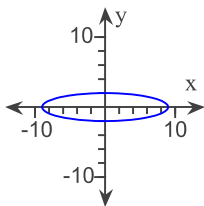
$$\frac{x^2}{4} = 1 - \frac{y^2}{16}$$

- ☐ A. x-intercepts are ± 4 ; y-intercepts are ± 16
☐ B. x-intercepts are ± 16 ; y-intercepts are ± 4
☐ C. x-intercepts are ± 4 ; y-intercepts are ± 2
☐ D. x-intercepts are ± 2 ; y-intercepts are ± 4

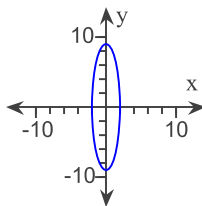
2. Graph the ellipse.

$$\frac{x^2}{4} + \frac{y^2}{81} = 1$$

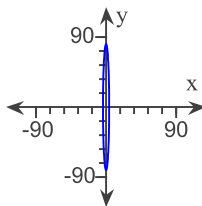
☐ A.



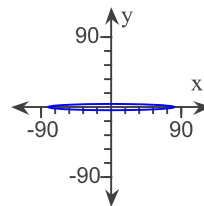
☐ B.



☐ C.



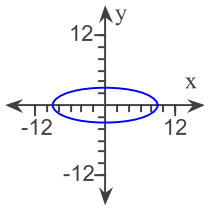
☐ D.



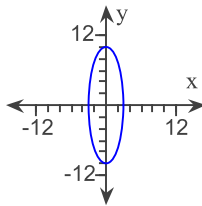
3. Graph the ellipse.

$$81x^2 + 9y^2 = 729$$

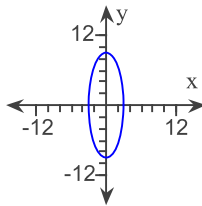
☐ A.



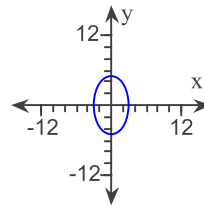
☐ B.



☐ C.



☐ D.



Student: _____
Date: _____
Time: _____

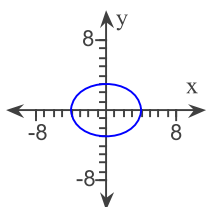
Instructor: Fred Khoury
Course: Math 2312-1000 Precalculus (Fall - 2015)
Book: Lial: College Algebra and Trigonometry, 4e

Assignment: Quiz Sec 4.6

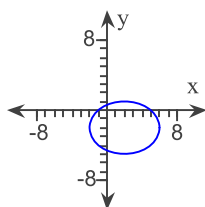
4. Graph the ellipse.

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

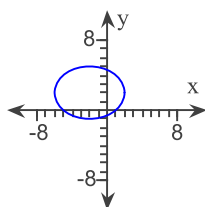
☐ A.



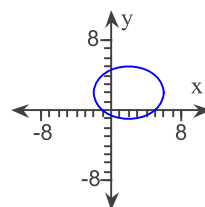
☐ B.



☐ C.



☐ D.



5. Write an equation for the ellipse with x-intercepts ± 4 and y-intercepts ± 6 .

☐ A. $\frac{x^2}{4} + \frac{y^2}{6} = 1$

☐ B. $\frac{x^2}{6} + \frac{y^2}{4} = 1$

☐ C. $\frac{x^2}{16} + \frac{y^2}{36} = 1$

☐ D. $\frac{x^2}{36} + \frac{y^2}{16} = 1$

6. Write an equation for the ellipse with foci at $(\pm 6, 0)$ and x-intercepts ± 10 .

☐ A. $\frac{x^2}{10} + \frac{y^2}{8} = 1$

☐ B. $\frac{x^2}{8} + \frac{y^2}{10} = 1$

☐ C. $\frac{x^2}{100} + \frac{y^2}{64} = 1$

☐ D. $\frac{x^2}{64} + \frac{y^2}{100} = 1$

Student: _____
Date: _____
Time: _____

Instructor: Fred Khoury
Course: Math 2312-1000 Precalculus (Fall - 2015)
Book: Lial: College Algebra and Trigonometry, 4e

Assignment: Quiz Sec 4.6

7. Write an equation for the ellipse with a major axis length of 10 and foci at $(-3, 0)$ and $(-3, -6)$.

☐ A. $\frac{(x+3)^2}{25} + \frac{(y-3)^2}{16} = 1$

☐ B. $\frac{(x+3)^2}{16} + \frac{(y-3)^2}{25} = 1$

☐ C. $\frac{(x+3)^2}{16} + \frac{(y+3)^2}{25} = 1$

☐ D. $\frac{(x-3)^2}{16} + \frac{(y+3)^2}{25} = 1$