

EXTRA PRACTICE — Exercises

Copyright © 2003 by Videotext *Interactive*

Unit IX – The Conic Sections

Part C – Ellipses

Lesson 1 – Ellipses - Standard Form

Graph the solution set ellipse for each of the following second-degree equations. In addition, identify the center and describe the two axes of symmetry.

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

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

3. $\frac{(x-1)^2}{16} + \frac{(y+5)^2}{9} = 1$

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

5. $\frac{(x+3)^2}{4} + \frac{(y-2)^2}{36} = 1$

EXTRA PRACTICE — Answer Key

Copyright © 2003 by Videotext Interactive

Unit IX – The Conic Sections

Part C – Ellipses

Lesson 1 – Ellipses - Standard Form

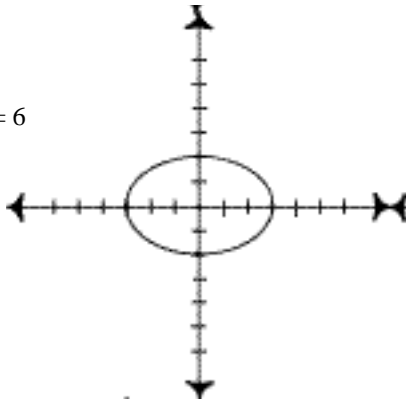
Graph the solution set ellipse for each of the following second-degree equations. In addition, identify the center and describe the two axes of symmetry.

1. center $(0,0)$

$a = 3, b = 2$

Horizontal axis = 6

Vertical axis = 4

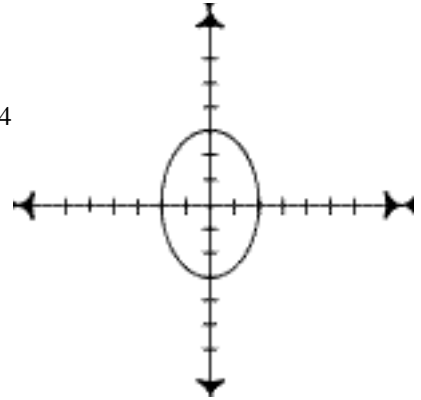


2. center $(0,0)$

$a = 2, b = 3$

Horizontal axis = 4

Vertical axis = 6

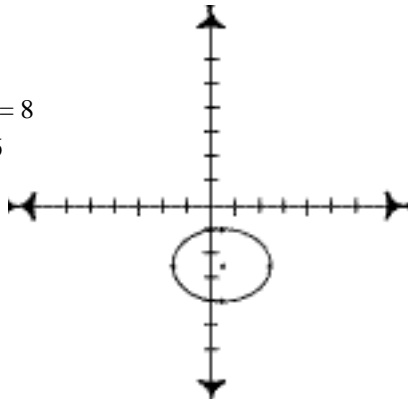


3. center $(1,-5)$

$a = 4, b = 3$

Horizontal axis = 8

Vertical axis = 6

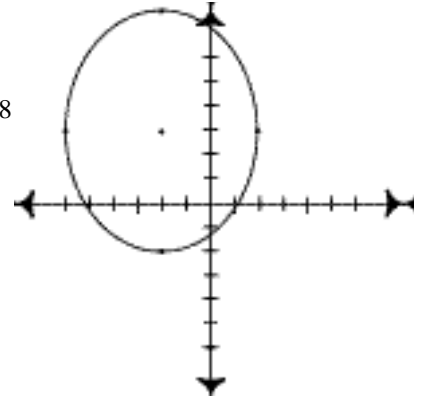


4. center $(-2,3)$

$a = 4, b = 5$

Horizontal axis = 8

Vertical axis = 10



5. center $(-3,2)$

$a = 2, b = 6$

Horizontal axis = 4

Vertical axis = 12

