

Section 9.6 p. 655 #1, 3-12

1. **VOCABULARY** Explain why circles, ellipses, parabolas, and hyperbolas are called conic sections.

GRAPHING Graph the equation. Identify the important characteristics of the graph.

3. $(x + 4)^2 = -8(y - 2)$ 4. $(x - 2)^2 + (y - 7)^2 = 9$ 5. $\frac{(x - 6)^2}{25} - (y + 1)^2 = 1$

6. $\frac{(y + 4)^2}{49} - \frac{(x + 8)^2}{9} = 1$ 7. $\frac{(x + 2)^2}{16} + \frac{(y - 2)^2}{36} = 1$ 8. $(x - 5)^2 + (y + 1)^2 = 64$

9. $(y - 1)^2 = 4(x + 6)$ 10. $\frac{x^2}{25} + \frac{(y - 2)^2}{4} = 1$ 11. $\frac{(x + 3)^2}{9} - \frac{(y - 4)^2}{16} = 1$

12. **★ MULTIPLE CHOICE** What are the coordinates of the co-vertices of the ellipse with equation $\frac{(x - 4)^2}{16} + \frac{(y - 1)^2}{4} = 1$?

(A) (0, 1), (8, 1) (B) (-8, 1), (0, 1) (C) (4, 3), (4, -1) (D) (-4, 3), (-4, -1)