Practice

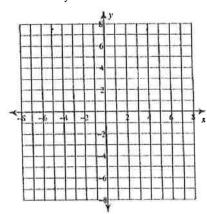
Form G

Exploring Conic Sections

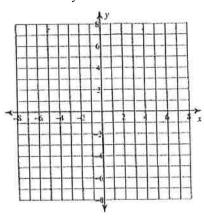
Graph each equation.

Identify the conic section and describe the graph and its lines of symmetry. Then find the domain and range.

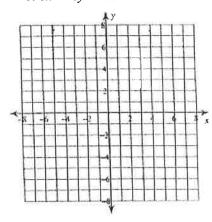
1.
$$9x^2 + 4y^2 = 36$$



2.
$$x^2 - y^2 = 4$$

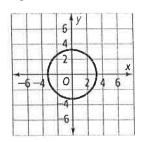


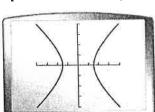
3.
$$8x^2 + 8y^2 = 40$$



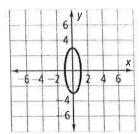
Identify the center and intercepts of each conic section. Give the domain and range of each graph. (On graphing calculator screens, each interval represents two units.)

4.

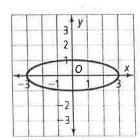




6.



7.



Match each equation with a graph in Exercises 4-7. (Hint: you will not use

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

$$x^2 + y^2 = 25$$

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

$$x^2 + v^2 = 9$$

$$x^2 + y^2 = 9 4x^2 + 9y^2 = 36$$

$$x^2 - y^2 = 9$$