

# 10-4 Standardized Test Prep

## Ellipses

### Gridded Response

Solve each exercise and enter your answer on the grid provided.

- In the equation for a horizontal ellipse  $\frac{x^2}{16} + \frac{y^2}{9} = 1$ , what is the positive value of the  $x$ -coordinates of the vertices?
- What is the positive  $y$ -coordinate of the foci of the ellipse with the equation  $25x^2 + 16y^2 = 400$ ?
- In the equation for a vertical ellipse  $\frac{x^2}{49} + \frac{y^2}{100} = 1$ , what is the positive value of the  $y$ -coordinates of the vertices?
- An ellipse has foci at  $(\pm 7, 0)$  and vertices at  $(\pm 16, 0)$ . What is the value of  $c$ ?
- Suppose you are planning a party at an elliptical park with one game at each foci. The major axis of the ellipse is 80 yd and the minor axis is 28 yd. How many yards will the games be from one another? Round to the nearest whole number.

### Answers

1.	2.	3.	4.	5.
				