

MORE PRACTICE: Parabolas 1

Find the specified quantities:

1. a. The Vertex

$(-2, -3)$

b. Coordinates of the Focus

$(-2, -2)$

c. Draw the Directrix

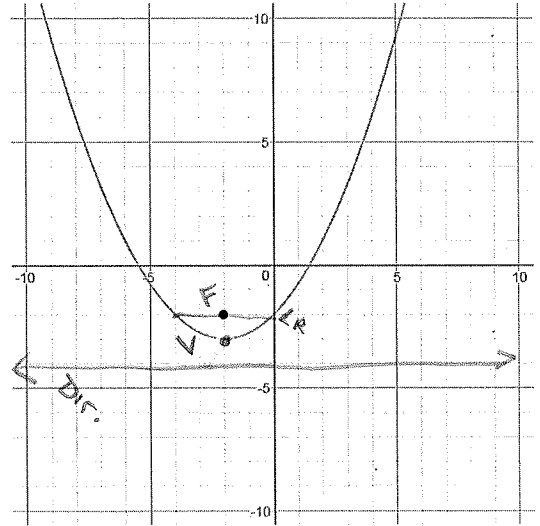
$y = -4$

d. The equation of the Directrix

e. Draw the Latus Rectum

4

f. The length of the Latus Rectum



2. a. The Vertex

$(4, 1)$

b. Coordinates of the Focus

$(8, 1)$

c. Draw the Directrix

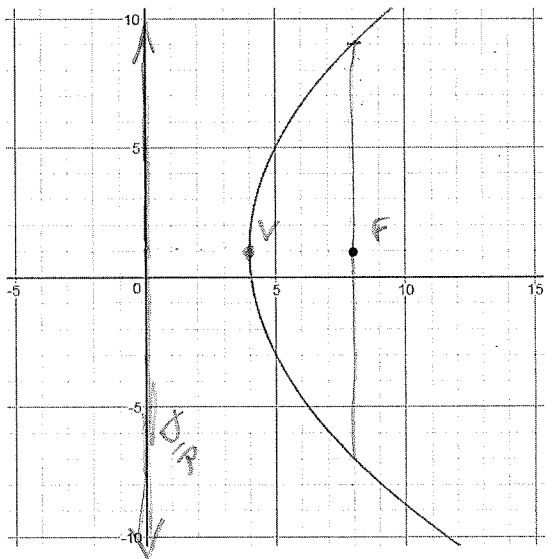
$x = 0$

d. The equation of the Directrix

e. Draw the Latus Rectum

16

f. The length of the Latus Rectum



3. a. The Vertex

$(0, 5)$

b. $h =$ 0

$k =$ 5

The equation of this parabola is : $y = -\frac{1}{8}x^2 + 5$

c. $a =$ $-\frac{1}{8}$

d. The coordinates of the Focus $(0, 3)$

e. Draw the Focus $(0, 5 + \frac{1}{4(-\frac{1}{8})})$
 $(0, 5 - \frac{1}{2})$ $(0, 5 - 2)$

f. The equation of the Directrix

$y = 7$

g. Draw the Directrix

h. Calculate the length of the Latus Rectum

8

