

1. Use this equation: $y = 5(x + 2)^2 - 6$

a) State the coordinates of the Vertex

b) State the coordinates of the Focus

c) Write the equation of the Directrix

2. Use this equation: $x = -\frac{1}{4}(y - 3)^2 + 8$

a) State the coordinates of the Vertex

b) State the coordinates of the Focus

c) Write the equation of the Directrix

3. The coordinates of the vertex of a parabola are $(-1, 9)$ and the coordinates of the Focus are $(-1, 5)$. Write the equation of the parabola.

EQ:

4. The coordinates of the vertex of a parabola are $(7, 2)$ and the equation of the Directrix is $x = 2$. Write the equation of the parabola.

EQ:

5. The Directrix is $y = -12$ and the coordinates of the Focus are $(-3, 11)$. Write the equation of this parabola.

EQ: