12.1: (Parabolas)

The equation of the directrix of the parabola with vertex $(1, -2)$ that has a vertical axis and passes through the point $(5,0)$, is

A) $y = -4$

B) $y = -2$

C) $y = -1$

D) $x = -1$

E) $x = 3$

The equation of the directrix of the parabola $2y^2 - 8y - 8x = 0$, is

A) $x = -2$

B) $x = 0$

C) $x = -1$

D) $y = 1$

E) $y = 3$

The focus of the parabola $y^2 + 4y + 16x - 12 = 0$, is

A) $(-3, -2)$

B) $(-2, -5)$

C) $(-2, -3)$

D) $(1, -2)$

E) $(-5, -2)$

A parabola has its focus at $(2,5)$. Its directrix is vertical and passes through $(-4,3)$. Its equation is

A) $y^2 - 10y - 12x + 13 = 0$

B) $(x - 2)^2 = 4(y - 4)$

C) $y^2 - 10y + 12x + 37 = 0$

D) $x^2 - 4x + 4y - 12 = 0$

E) $y^2 - 12y - 10x - 37 - 0$

The equation in the standard form of the parabola that has vertex $(1, -1)$ axis of symmetry parallel to x-axis and passes through the origin is equal to

a) $(y + 1)^2 = -(x - 1)$

b) $(y + 1)^2 = (x - 1)$

c) $(y + 1)^2 = -4(x - 1)$

d) $(x - 1)^2 = -(y - 1)$

e) $(x - 1)^2 = -4(y - 1)$

A parabola has equation $3x^2 + 2mx + 8y = -24$ its vertex is $(3, k)$. Then the value of k is

A) $\frac{3}{8}$

B) 3

C) -9

D) 24

E) 1

If the equation of the directrix of the parabola $(3x + 6)^2 = 18y - 36$ is $y = m$

then $m =$

A) $\frac{3}{2}$

B) $-\frac{3}{2}$

C) $-\frac{1}{2}$

D) $\frac{5}{2}$

E) 2

The equation of the parabola with focus at $(-3,2)$ and vertex at $(-3, -1)$ is

A) $x^2 - 12y + 6x - 3 = 0$

B) $y^2 - 12x + 6y - 3 = 0$

C) $x^2 + 12y - 6x + 3 = 0$

D) $y^2 + 12x + 6y - 3 = 0$

E) $x^2 + 12y + 6v + 3 = 0$

The focus of the parabola given by the equation $2(2y - 4)^2 = 64(x - 1)$ is equal to

B) (3,1)

C) (2,3)

D) (4,1)

E) (1,4)