

Key

③ $(y-4)^2 = 20(x+2)$

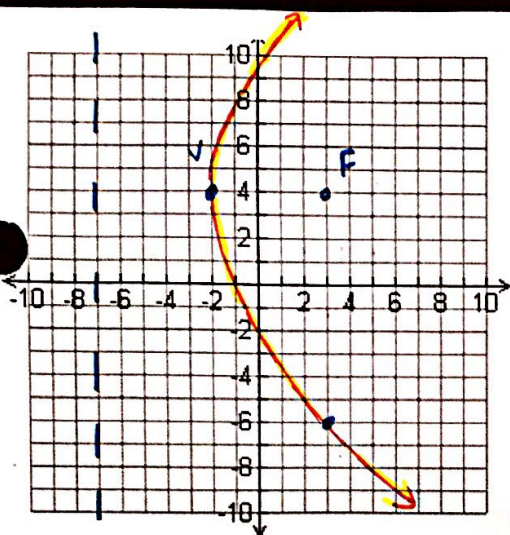
V: (-2, 4)

P: 5

Directrix: $x = -7$

Axis: $y = 4$

F: (3, 4)



⑥ $-40(x+4) = (y-9)^2$

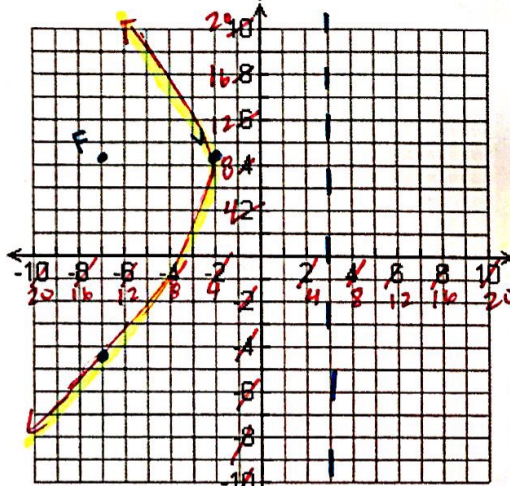
V: (-4, 9)

P: -10

F: (-14, 9)

D: $x = 6$

A: $y = 9$



⑨ $-4(y+2) = (x+8)^2$

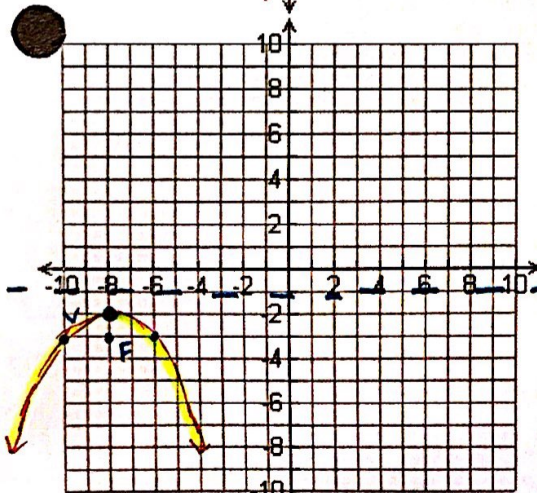
V: (-8, -2)

P: -1

F: (-8, -3)

D: $y = -1$

A: $x = -8$



⑩ $60x - 80 = 3y^2 + 100$

$60x - 180 = 3y^2$

$20x - 60 = y^2$

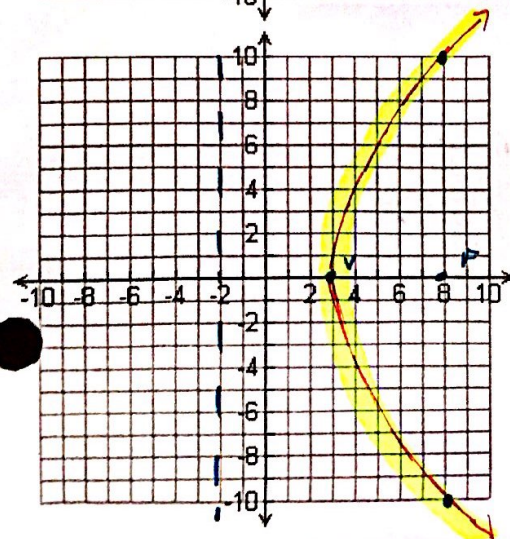
$20(x-3) = y^2$

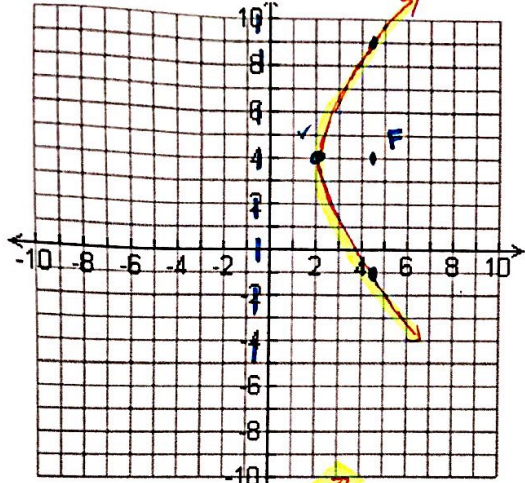
V: (3, 0)

P: 5

D: $x = -2$

A: $y = 0$





$$(21) \quad -72 = 2y^2 - 16y - 20x$$

$$\frac{20x - 72 = 2y^2 - 16y}{2}$$

$$-10x - 36 = y^2 - 8y + 16$$

$$10x - 20 = (y - 4)^2$$

$$10(x - 2) = (y - 4)^2$$

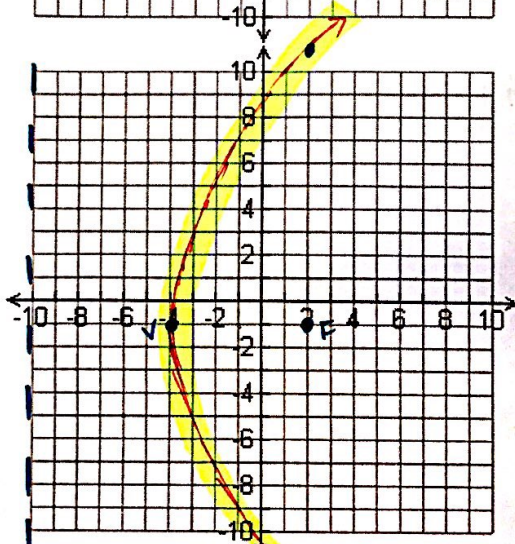
$$V: (2, 4)$$

$$p: 2.5$$

$$F: (4.5, 4)$$

$$D: x = -0.5$$

$$A: y = 4$$

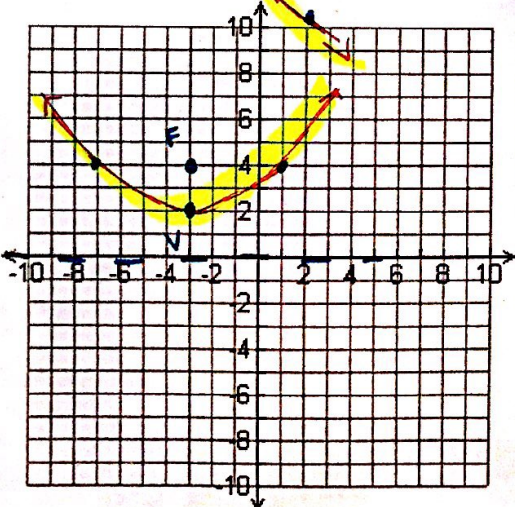


(27)

$$p = 6$$

$$V: (-4, -1)$$

$$(y + 1)^2 = 24(x + 4)$$

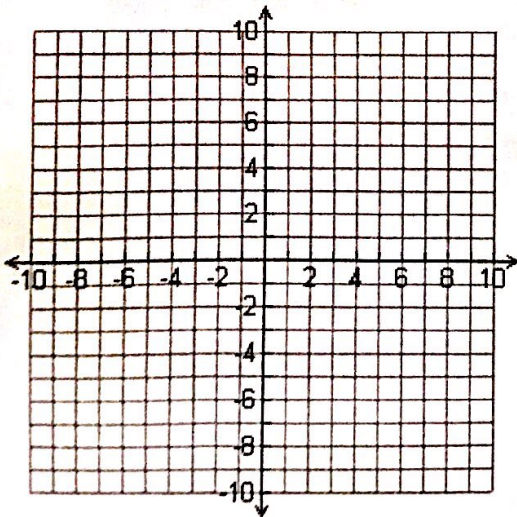


(29)

$$p = 2$$

$$V: (-3, 2)$$

$$(x + 3)^2 = 8(y - 2)$$



(53) opens upward

(54) opens to the right

$$(57) \quad (y - 1)^2 = -16(x + 5)$$

$$(58) \quad (x - 2)^2 = 20(y + 7)$$