

$$1. x^2 = -8y$$

$$(x-0)^2 = -8(y)$$

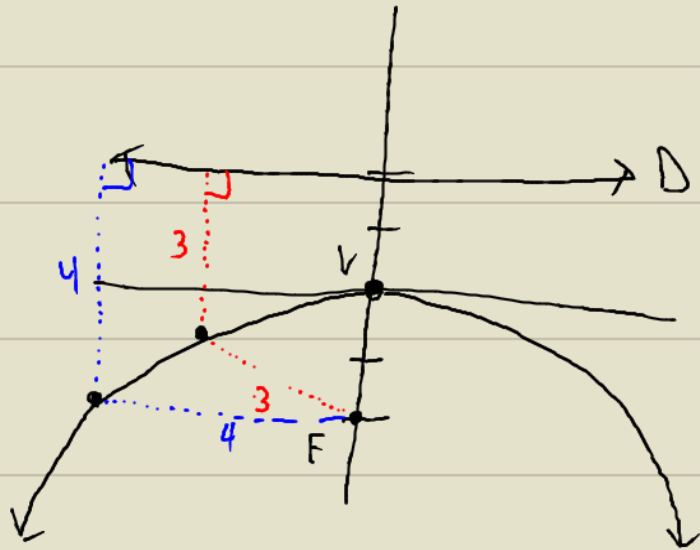
$$(x-0)^2 = 4(-2)(y-0)$$

\downarrow opp sign \downarrow SAME SIGN \downarrow opp sign
 $h=0$ $p=-2$ $k=0$

VERTEX: $(h, k) = (0, 0)$

FOCUS: $(h, k+p) = (0, 0+(-2))$
 $= (0, -2)$

DIRECTRIX: $y = k-p$
 $y = 0 - (-2)$
 $y = 2$



$$2. (y+2)^2 = 4(x-2)$$

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

\downarrow \downarrow \downarrow
 $k=-2$ $p=1$ $h=2$

VERTEX: $(h, k) = (2, -2)$

FOCUS: $(h+p, k) = (2+1, -2)$
 $(3, -2)$

DIRECTRIX: $x = h-p$
 $x = 2-1$
 $x = 1$

