

What type of conic?

x^2/y^2 missing

P

$x^2 \neq y^2$ one is neg

H

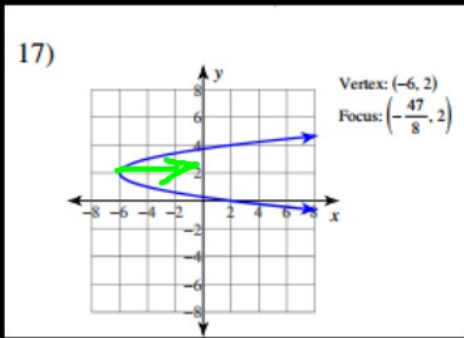
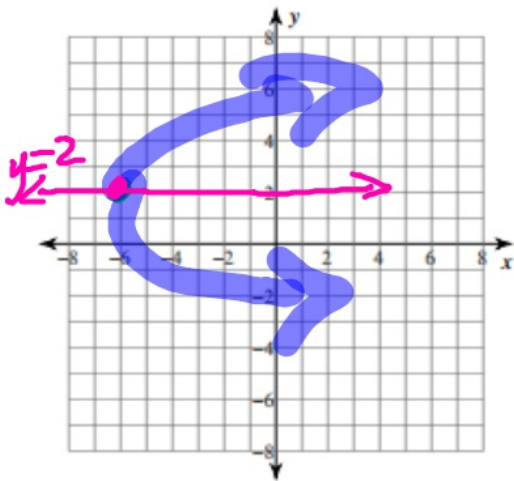
$x^2 \neq y^2$ pos, \neq coeff.
are same

C

$x^2 \neq y^2$ pos \neq coeff.
are diff.

E

17) $-2y^2 + x + 8y - 2 = 0$



$$-6 + \frac{1}{2}$$

$$-\frac{48}{8} + \frac{1}{8}$$

$$-\frac{47}{8}$$

x-coord
of focus

$$-2y^2 + 8y = -x + 2$$

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

$$-2(y^2 - 4y + 4) = -x + 2 + \underline{-8}$$

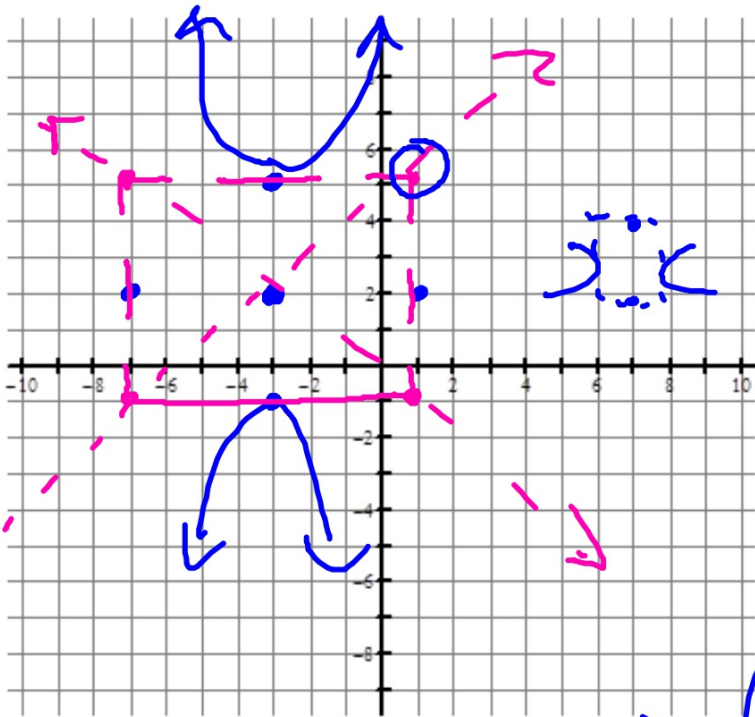
$$-2(y - 2)^2 = -x - 6$$

$$-2(y - 2)^2 = -(x + 6)$$

$$(y - 2)^2 = \frac{1}{2}(x + 6)$$

$$4a = \frac{1}{2}$$

$$a = \frac{1}{8}$$



$$\frac{(y-2)^2}{9} - \frac{(x+3)^2}{16} = 1$$

Center: $(-3, 2)$

$$a^2 = 9 \rightarrow a = 3$$

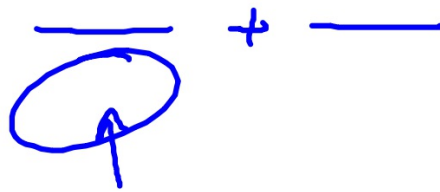
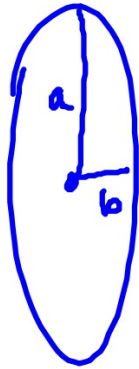
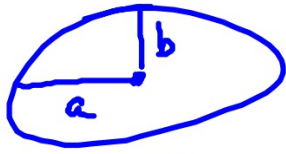
$$b^2 = 16 \Rightarrow b = 4$$

$$(y-k) = \pm \frac{a}{b} (x-h)$$

$$y - y_1 = m(x - x_1)$$

$$(\quad)^2$$

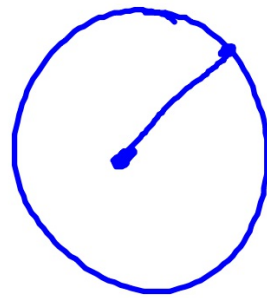
$$(\quad)^2 =$$



$$(x-h)^2 + (y-k)^2 = r^2$$

center: (h, k)

radius = r



③ Describe how you prepared

④