RIGHT

6.

VERTICES: $(-3,6)$ $(-3,-2)$

ASYMPTOTE: $y-2=\frac{4}{5}(x+3)$

So $b=5$

$h=-3$

$k+a=6$

$k-a=-2$

$k+a=6$

$k-a=-2$

$2k=4$

$k=2$

$2+a=6$

$a=6-2$

$a=4$

FIND c

$b^2=c^2-a^2$

$5^2=c^2-4^2$

$25=c^2-16$

$25+16=c^2$

$41=c^2$

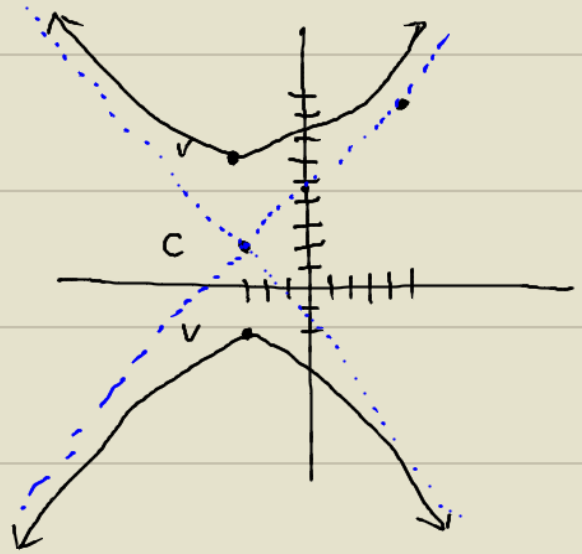
$c=\sqrt{41}$

$a=4 \quad b=5 \quad c=\sqrt{41} \quad h=-3 \quad k=2$

$$\frac{(y-k)^2}{a^2}-\frac{(x-h)^2}{b^2}=1$$

$$\frac{(y-2)^2}{4^2}-\frac{(x-(-3))^2}{5^2}=1$$

$$\frac{(y-2)^2}{16}-\frac{(x+3)^2}{25}=1$$



$y-2=\frac{4}{5}(x+3)$

$y=\frac{4}{5}x+\frac{12}{5}+2$

$y=\frac{4}{5}x+\frac{22}{5}$

$y=\frac{4}{5}x+4.4$