

HW 3 -Pg. 748 #5-11 odd, 19, 23, 25

5. center (0,0), v(9,0), cv(0,7)

$$\frac{x^2}{81} - \frac{y^2}{49} = 1$$

7. a=10, b=8, vertical

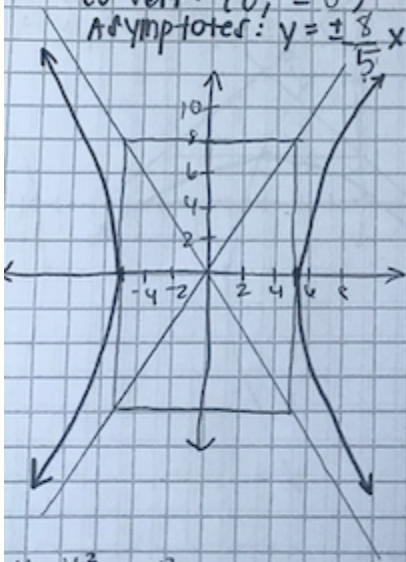
$$\frac{y^2}{100} - \frac{x^2}{64} = 1$$

$$9. \frac{x^2}{25} - \frac{y^2}{64} = 1$$

vertices: $(\pm 5, 0)$

co-vert: $(0, \pm 8)$

Asymptotes: $y = \pm \frac{8}{5}x$



$$11. \frac{y^2}{100} - \frac{x^2}{81} = 1$$

vertices: $(0, \pm 10)$

co-vert: $(\pm 9, 0)$

asymptotes: $y = \pm \frac{10}{9}x$

19. center (0,0), vertex (-8,0) F(17,c)

$$\frac{x^2}{64} - \frac{y^2}{225} = 1$$

$$23. \frac{y^2}{25} - \frac{x^2}{81} = 1$$

vertices: $(0, \pm 5)$

co-vert: $(\pm 9, 0)$

Asymptotes: $y = \pm \frac{5}{9}x$

$$25. \frac{x^2}{4} - \frac{y^2}{121} = 1$$

vertices: $(\pm 2, 0)$

co-vert: $(0, \pm 11)$

Asymptotes: $y = \pm \frac{11}{2}x$