Fill in the blank.

1. In a Hyperbola, C represents _____.

2. In a Hyperbola, A represents _____.

3. In a Hyperbola, the axes are called the transverse axis and the _____axis.

Find the center, transverse axis, vertices, foci, and the equations for the asymptotes.

4. $\dfrac{x^2}{16} - \dfrac{y^2}{25} = 1$ C_____, T. axis _____

V_____, F_____, Asymptotes_____

Write the equation in standard form and find the center, transverse axis, vertices, foci, and the slope for the asymptotes.

5. $9y^2 - 4x^2 - 8x - 54y + 41 = 0$ Equation_____, C_____

T. axis_____, V_____, F_____

Slope_____

Find the equation for the hyperbola in standard form given the following information.

6. Foci (-5,0), (5,0), DOFR = 8   **7.** Foci (-2,4), (-2,-2), DOFR = 2

8. Foci (0,2), (6,2), Slope of Asymptotes: $\pm\dfrac{\sqrt{5}}{2}$