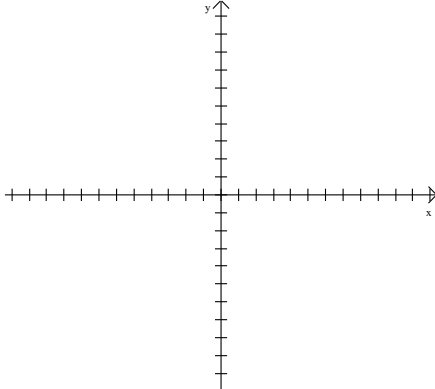Hyperbolas

Name _____

Hour _____ Date _____

You are to fill in the missing information and sketch the graph.
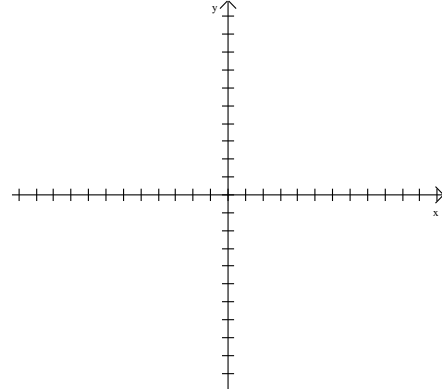
1. $\dfrac{y^2}{4} - \dfrac{x^2}{25} = 1$

center is (_____, _____)
Asymptotes are _____ & _____
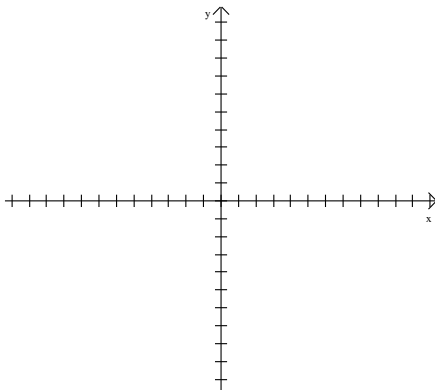Vertices are (_____, _____) & (_____, _____)

2. $\dfrac{x^2}{9} - \dfrac{y^2}{16} = 1$

center is (_____, _____)
Asymptotes are _____ & _____
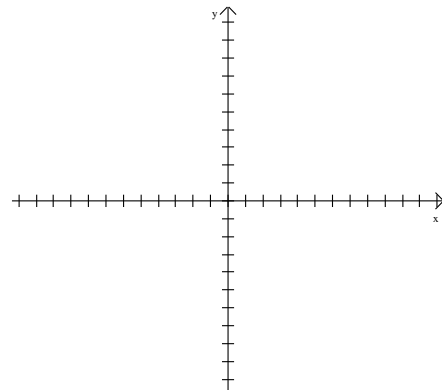Vertices are (_____, _____) & (_____, _____)

3. $\dfrac{x^2}{4} - \dfrac{y^2}{25} = 1$

center is (_____, _____)
Asymptotes are _____ & _____
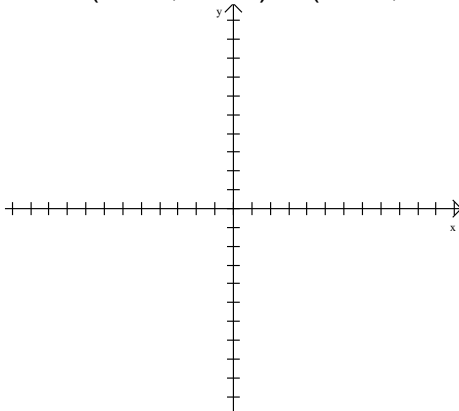Vertices are (_____, _____) & (_____, _____)

4. $\dfrac{x^2}{4} - \dfrac{y^2}{9} = 1$

center is (_____, _____)
Asymptotes are _____ & _____
Vertices are (_____, _____) & (_____, _____)

5. x^2-6x-4y^2-16y-8=0

center is (_____, _____)
Asymptotes are _____ & _____
Vertices are (_____, _____) & (_____, _____)

6. -4x^2-16x+y^2-2y-19=0

center is (_____, _____)
Asymptotes are _____ & _____
Vertices are (_____, _____) & (_____, _____)