Name _____ Date _____

Equations of Hyperbolas - Independent Practice Worksheet

Complete all the problems. Find an equation for the hyperbola with the following described features:

1. Center (2, 4), vertex (0, 4), and focus (5, 4).

2. x-intercepts at $x = -10$ and $x = 4$, and foci at (–12, 0) and (6, 0).

3. Center (4, 5), vertex (5, 5), and focus (0, 5).

4. x-intercepts at $x = -4$ and $x = 2$, and foci at (–6, 0) and (4, 0).

5. Center (7, 8), vertex (4, 8), and focus (0, 8).

6. x-intercepts at $x = -3$ and $x = 1$, and foci at (–4, 0) and (2, 0).

7. Center (5, 7), vertex (0, 7), and focus (12, 7).

8. x-intercepts at $x = -9$ and $x = 5$, and foci at (–12, 0) and (8, 0).

9. Center (6, 9), vertex (0, 9), and focus (14, 9).

10. x-intercepts at $x = -8$ and $x = -2$, and foci at (–11, 0) and (1, 0).