Name: _____   Date _____

<u>Topic : Hyperbolas - Find the foci and vertices of the hyperbola - Worksheet 1</u>

Find the foci and vertices of the hyperbola:

1. $(x-4)^2/49 - (y-4)^2/1 = 1$ **2.** $(x-1)^2/25 - (y-3)^2/16 = 1$

3. $(x-2)^2/121 - (y-2)^2/169 = 1$ **4.** $(x-2)^2/4 - (y-2)^2/49 = 1$

5. $(x+1)^2/36 - (y-1)^2/4 = 1$ **6.** $(x+3)^2/4 - (y+2)^2/9 = 1$

7. $(x-1)^2/81 - (y-1)^2/25 = 1$ **8.** $(x+1)^2/25 - (y+2)^2/4 = 1$

9. $(x-2)^2/169 - (y-3)^2/225 = 1$ **10.** $(x-1)^2/36 - (y-4)^2/64 = 1$

Name: _____   Date _____

<u>Topic: Hyperbolas - Find the foci and vertices of the hyperbola - Worksheet 2</u>

Find the foci and vertices of the hyperbola:

   1. $(x+2)^2/16 - (y-4)^2/64 = 1$ **2.** $(x-1)^2/36 - (y+2)^2/9 = 1$

   3. $(x-3)^2/16 - (y-3)^2/144 = 1$ **4.** $(x-1)^2/4 - (y-2)^2/9 = 1$

   5. $(x+1)^2/16 - (y-1)^2/9 = 1$ **6.** $(x-3)^2/9 - (y+2)^2/64 = 1$

   7. $(x+1)^2/16 - (y-1)^2/9 = 1$ **8.** $(x-1)^2/16 - (y+3)^2/121 = 1$

   9. $(x-3)^2/9 - (y-1)^2/64 = 1$ **10.** $(x+1)^2/36 - (y-2)^2/25 = 1$

Name: _____   Date _____

Topic: <u>Hyperbolas - Find the foci and vertices of the hyperbola - Worksheet 3</u>

Find the foci and vertices of the hyperbola:

1. $(x-3)^2/9 - (y+2)^2/64 = 1$ **2.** $(x-4)^2/4 - (y+1)^2/16 = 1$

3. $(x-3)^2/25 - (y-4)^2/169 = 1$ **4.** $(x+1)^2/9 - (y-2)^2/25 = 1$

5. $(x-1)^2/4 - (y-1)^2/9 = 1$ **6.** $(x-2)^2/25 - (y+2)^2/4 = 1$

7. $(x+1)^2/100 - (y-1)^2/25 = 1$ **8.** $(x-1)^2/16 - (y-3)^2/144 = 1$

9. $(x-2)^2/9 - (y-1)^2/4 = 1$ **10.** $(x+1)^2/1 - (y-2)^2/4 = 1$

Name: _____   Date _____

<u>Topic: Hyperbolas - Find the foci and vertices of the hyperbola - Worksheet 4</u>

Find the foci and vertices of the hyperbola:

   1. $(x-4)^2/9 - (y-2)^2/36 = 1$ **2.** $(x+4)^2/4 - (y+1)^2/9 = 1$

   3. $(x+1)^2/64 - (y-3)^2/144 = 1$ **4.** $(x-1)^2/9 - (y-2)^2/16 = 1$

   5. $(x-2)^2/4 - (y+1)^2/169 = 1$ **6.** $(x-3)^2/9 - (y+2)^2/1 = 1$

   7. $(x+2)^2/16 - (y+1)^2/4 = 1$ **8.** $(x+1)^2/9 - (y+2)^2/256 = 1$

   9. $(x-3)^2/4 - (y-2)^2/9 = 1$ **10.** $(x-1)^2/81 - (y-2)^2/4 = 1$

Name: _____   Date _____

<u>Topic: Hyperbolas - Find the foci and vertices of the hyperbola - Worksheet 5</u>

Find the foci and vertices of the hyperbola:

1. $(x-4)^2/36 - (y-2)^2/64 = 1$ **2.** $(x-2)^2/1 - (y-1)^2/4 = 1$

3. $(x+1)^2/16 - (y-3)^2/9 = 1$ **4.** $(x+1)^2/4 - (y-2)^2/36 = 1$

5. $(x+2)^2/81 - (y-1)^2/144 = 1$ **6.** $(x-2)^2/4 - (y-2)^2/9 = 1$

7. $(x-1)^2/169 - (y-1)^2/16 = 1$ **8.** $(x-1)^2/100 - (y+2)^2/1 = 1$

9. $(x-3)^2/9 - (y-2)^2/81 = 1$ **10.** $(x-1)^2/169 - (y-2)^2/144 = 1$