Precalculus Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Conic Sections Review

**Write the equation of the conic section that meets each set of criteria:**

1. A circle whose center is at the point (3, -7) and contains the point (-9, -2).

2. An ellipse whose center is at the point (-5, 8), the length of its minor axis is 8 and the length of its horizontal axis is 14.

3. Circle with a diameter whose endpoints are (-3, 12) and (5, 2).

4. An ellipse whose center is at (3, 5), the length of the vertical minor axis is 6 and the foci are at the points (9, 5) and (-3, 5).

5. A parabola whose vertex is (2, 3) and whose directrix is the line x = 4.

6. An ellipse whose vertices are at (9, 3), (-5, 3), (2, 6), (2, 0).

**Graph the following equations. State all key information related to the conic section.**

7. 



8. 



9. 



10. 



11. 



12. 



13. 

