Name_____

ALGEBRA II JOURNAL
Conic Sections

1. Conic sections are given this title because _____ .

2. (a) A hyperbola is the set of points _____

    _____ .

    (b) A circle is the set of points _____

    _____ .

    (c) A parabola is the set of points _____

    _____ .

    (d) An ellipse is the set of points _____

    _____ .

3. (a) The measure of how flat or round is an ellipse is called its _____ .

    (b) The eccentricities of each of the four conic sections are:

    Hyperbola _____   Circle _____

    Parabola_____   Ellipse _____

4. The purpose of an asymptote is _____

    _____ .

5. When solving systems of second degree equations, you should use elimination if _____

    _____, but you should use substitution if _____

    _____ .

6. Draw a picture showing the reflective properties of a circle, parabola, ellipse, and hyperbola.

7. Draw 4 cones. Show how each must be sliced in order to form each conic section.

8. List **two** real world applications for **each** conic section.

Circle—

Ellipse—

Parabola—

Hyperbola—

FORMULAS

9. List the rules for identifying the four conic sections given an equation.

Circle—

Ellipse—

Parabola—

Hyperbola—

10. After your semester exam, place your card in your portfolio following this journal.