

Circle One:

Name: _____

7:45-8:35 (361)

8:50-9:40 (362)

Math222-4, Spring 2007

Quiz #5: 03-14-07

No Calculators.

1. (6 Points) Sketch the the region described by $9y^2 \leq 36 + 4x^2$. Include all relevant information: location of foci, vertices, asymptotes/minor vertices (if any). Indicate how you decide where to shade.

2 a. (1 Point) Identify the conic section described by $x^2 + 4y^2 = 3 + 2x$.

2 b. (5 Points) Sketch a graph of the the conic section described by $\frac{(x-1)^2}{4} + y^2 = 1$. Include location of foci and major/minor vertices.

3. (3 Points) Susan decides she wants to buy a telescope and walks into a Wal-Mark. The teller informs her their telescopes are made with hyperbolic mirrors instead of parabolic mirrors. Fortunately, Susan took Professor Isaac's math 222 course and knew better. Why does Susan leave the store? (You may write your answer on the back - an answer of 'they don't work' will not receive any credit).