

Math 1414
College Algebra
Lab Exercise # 1
Mr. Shea

Name: _____

Date: _____

Section: _____

Semester: _____

Grade: _____

Attach computer printouts to this sheet and submit your assignment to your instructor.

- 1a. Using [Y=] on the TI-83 Graphing Calculator, put in $Y_1 = 2\sqrt{\frac{x^2}{9} - 1}$
and $Y_2 = -2\sqrt{\frac{x^2}{9} - 1}$.

Using the [WINDOW] key, input the following:

$$x \text{ min} = -15$$

$$x \text{ max} = 15$$

$$x \text{ scl} = 3$$

$$y \text{ min} = -10$$

$$y \text{ max} = 10$$

$$y \text{ scl} = 2$$

- 1b. Touch the [GRAPH] key and observe whether the graph is

1. A parabola

2. An ellipse

3. A hyperbola

(Circle one of the above)

- 1c. Use the TI-Graph Link to print the graph

Use the graph to determine the following:

- 1d. Is the graph the graph of a function? Yes _____ No _____ (Check one)

- 1e. The domain in interval notation.

- 1f. The range in interval notation.

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*****If in doubt, Print it out!*****

1a) To enter a function to graph follow the instructions on the additional information sheet. Be sure to type it just as shown. For extra precaution you should put parentheses around $\left(x^2/9 - 1\right)$ as shown. Do not forget to close the parentheses of the square root. Enter the window as given.

1b) No guidance needed. Use your textbook.

1c) Follow the direction on the additional information sheets to use the Graph-Link or TI Connect programs.

1d) No guidance needed. Use your textbook.

1e) No guidance needed. Use your textbook. Make sure to use interval notation.

1f) No guidance needed. Use your textbook. Make sure to use interval notation.