

ALGEBRA 2 JOURNAL
Models, Inequalities & Absolute Value

INSTRUCTIONS: Complete each of the following questions on this sheet of paper. Journals are always due on Review Day.

1. (a) When solving an equation containing several fractions, the best thing to do is _____
 _____.
- (b) If you get a result of $4 = 0$ when solving an equation, then the appropriate answer is _____
 _____.
- (c) If you get a result of $5 = 5$ when solving an equation, then the appropriate answer is _____
 _____.
2. (a) What should first be done to the compound inequality $3x + 2 > 4x - 5 < 2x + 7$ before attempting to solve for x ? _____
- (b) After solving each separate inequality for x , what final step must be performed in any compound inequality in order to determine the final solution? _____
- (c) After solving and graphing a compound inequality on a number line, the solutions of an OR problem are located _____.
- (d) The solutions of an AND problem are located where _____.
3. The testing points method for solving an inequality on a number line, the solutions of an OR problem are located _____.
4. When testing points, you want the _____ solutions if the expression is >0 , while you want the _____ solutions if the expression is <0 .
5. The two steps required to solve any equation or inequality containing one absolute value are:
 1. _____
 2. _____
6. (a) When solving inequalities containing an absolute value, the point in the problem when you can determine whether to use AND or OR is when _____
 _____.
- (b) You know whether to use AND or OR by remembering the saying _____
 _____.
7. (a) Matrix addition/subtraction is possible when _____
 _____.
- (b) Matrix multiplication is possible when _____
 _____.
- (b) A 7×3 matrix is multiplied by a 3×4 matrix. The dimensions of the result will be _____.
8. (a) When adding or subtracting two numbers involving significant digits, the answer should be rounded to the smallest number of _____ in the original measurements.
- (b) When multiplying/dividing two numbers involving significant digits, the answer should be rounded to the smallest number of _____ in the original measurements.
- (c) A multiplication calculation involves two measurements and one fixed number. You determine how many digits to round the final answer to by looking at _____

9. (a) A scatter plot has a _____ correlation if both variables increase or both variables decrease.
- (b) A scatter plot has a _____ correlation if one variable decreases while the other variable increase.

10. (a) When creating a scatter plot on your calculator, you must create a _____ document to enter the data.
- (b) To create the scatter plot, you must first create a new page by pressing _____ and then select a _____ type of document.
- (c) To change how the graph is scaled you must go to _____ to make the changes.

11. Important Rules, Formulas, Etc.

List the following rules, formulas, or steps. When giving formulas, be sure to indicate what each part of the formula represents.

- a) List the steps necessary for solving an inequality by testing points.

- b) List the five rules of significant digits.

- | | |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. | |

- c) Draw a scatter plot showing each of the following.



no correlation



positive correlation



negative correlation

- d) Fill in the following table with the 6 sets of numbers.

Name of Set	Symbol	3 examples	Name of Set	Symbol	3 examples