**Reflective Portfolio Algebra 1**



**Unit 2: Solving Equations and Inequalities**

At the conclusion of each unit, you will create at least two-page reflective study sheet.

## Section 1: Vocabulary (words/ or diagram) Define each of the following or provide an example for each.

1. Define an expression: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Define Literal Equations:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Define Consecutive integers:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Define Compound inequalities: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Section 2: Formulas and Rules:

Provide an example for each:

1. Associative property: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B) Commutative Property: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

C) Addition property: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ D) Distributive property: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Section 3: Key Methods and Concepts:

1. Write an inequality for each to describe the solution set and then write it in Interval notation.

a) b)

1. Solve the following equation for x:
2. $ \frac{5}{x}=\frac{3}{x-2}$ b.$\frac{16}{2x}+2=6$
3. Solve the following compound inequalities and represent the solution graphically and in an interval notation:

a. $2x+5\geq 3 or -3\left(x+3\right)\geq 6 b. -5<2x+ 1<4 $

1. For each of the following word problems define the variables and solve.
2. Find two consecutive odd integers whose sum is 72.
3. Brian had 5 times as many quarters as dimes. If the total value of his coins was $16.20, how many of each kind of coin did he have?
4. The perimeter of a rectangle is 104 feet. The length is two feet more than four times the width. Find the length and the width.
5. Dakota begins his kindergarten year able to spell 10 words. He is going to learn to spell 2 new words every day. Determine the minimum number of whole days it will take for him to be able to spell *at least* 75 words.

e.Solve for x in terms of y and z*.* $\frac{1}{5}x-y=z$

All the information that you need to complete this portfolio is in your Do now, notes, and classwork.

This study guide needs to be NEAT and ORGANIZED!