**Design Your Own Rational Functions Test!**

🙞 **Objective:** You will demonstrate your knowledge of rational functions through creating an assessment and solution key, as well anticipating questions and appropriate responses regarding such concepts.

🙞 **Directions:** Assume you are helping to teach College Prep Algebra II next year. Your goal is to design an assessment that will allow the students to demonstrate their knowledge of rational functions.

**Guidelines:**

**★** **Number of Problems** Your test should include **at least** **eight** problems.

**★** **Concepts Addressed** The following concepts must be addressed at least once. That does not mean that they need to be addressed in different problems though. For example, you may have a multi-part problem that addresses more than one concept, or even a problem involving more than one operation! ☺

- Simplifying Rational Expressions - Vertical Asymptotes/Holes

- Domains of Rational Functions - Multiplying Rational Expressions

- Dividing Rational Expressions - Adding Rational Expressions

- Subtracting Rational Expressions - Solving Rational Equations

**★** **Problem Types** The following types of problems must be included at least once:

- Open Ended - Multiple Choice

- True or False - Requiring Justification/Reasoning

\*Be creative! You may use your previous tests/quizzes for examples of problem format, and may

even want to research real world applications of rational functions to earn the highest possible score on the rubric for this section! You can also use multi-step problems, multi-part problems, multi-operation problems, etc.

**★** **“Scratch work”** You must include any “scratch work” you do when creating the problems. I expect this work to be messy, so do not worry about neatness for this section. I understand that you may have to play around with the numbers a lot to make the problems work out the way you would like them to!

**★** **Solution Key** You must have a separate copy of your test as an answer key. Be sure to show all of your work neatly, and box the final answer for each problem. Feel free to state the point values for each problem as well!

**Please organize your work with a paper clip as follows:**

* Rubric
* Blank Copy of Assessment
* Solution Key
* Scratch Work

**Be sure to follow all of the guidelines carefully, check your work, and use the rubric provided to ensure the highest score. Have fun, be creative, and let me know if you have any questions! ☺**