STEM Accelerated Algebra I   Unit 1 Study Guide

1. Know the components of the Real Number System. Be able to draw diagram that shows all the subcomponents of the Real Number System [1.1]

2. Understand the difference between rational numbers and irrational numbers. [1.1]

3. Know the 4 cases involving operations that combine rational numbers and irrational numbers. Also, be able to describe or explain why using these cases. [1.1]

4. Be able to convert radicals into exponential forms (and vice versa) [1.2]

5. Be able to simplify radicals to their simpliest form. [1.2]

6. Know how to set up a ratio correct using the 3 different forms. In addition, be able to simplify ratios to their simpliest form. [1.3]

7. Be able to solve proportions from given rates. [1.3]

8. Understand how to use ratios to answer certain questions like finding the total. [1.3]

9. Be able to convert from one unit to another by dimensional analysis [1.4]

10. Know the different synonyms for operations such as addition, etc. [1.4]

11. Be able to use variables to create equations from words [1.5]

12. Be able to solve simple linear equations in order to find the unknown. [1.5]

13. Know and be able to identify the different parts of an expression such as constant, variable, coefficient. [1.5]

TEST FORMAT   75 minute examination

Section 1 — Multiple Choice — 45 minutes

Section 2 — Free Response — 30 minutes