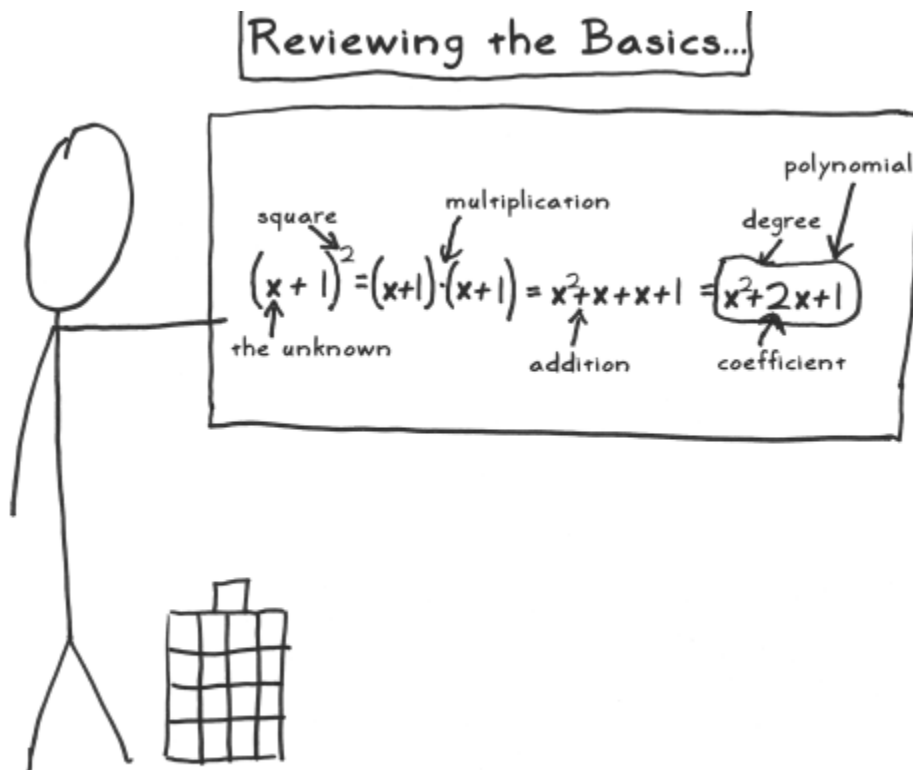


Algebra 1

Quarter Four



“The difference between the poet and the mathematician is that the poet tries to get their head into the heavens while the mathematician tries to get the heavens into their head.”

-G.K. Chesterton

Overview

Lessons will be given in class. You will have multiple mini lessons throughout the week. If you are struggling with a concept, it is your responsibility to review the lessons and ask questions. I will answer any questions you have during the lesson but after that we will follow the “three before me” principle. You must ask three of your peers before you ask me for help.

Math Journal: I encourage use of your Algebra I journal during lessons and work time. I advise you to use your journal to take notes during lessons and to work on assignments. Make sure it is neat and organized. Any and all important information from the lessons should be kept in this journal. You will be able to use your journals for formative assessments (quizzes).

General Guidelines:

Problem Sets – 40% of your grade is based on completing each homework assignment.

Homework Assignments Are Recommended Problems For Learning (and are required to pass this class!). It is recommended that you do the assignments or similar math problems for you to understand and retain the concepts. Use the work period to ask for help from your peers and teacher. **You will submit pictures of your assignments through Google Classroom by Sunday night (11:59pm) each week. In addition, you will only be able to turn in assignments from a given chapter up until the date of the relevant assessment. You will only receive full credit if you show your work!**

Quizzes/Assessments – Quizzes/Assessments make up 30% of your grade and you must complete each quiz/assessment prior or on the date it is scheduled. **Remember: you can always use your notebook on quizzes and exams.** You must make at least 70% to “pass” the quiz/assessment. If you do not pass a quiz, you may retest using a similar exam during my tutoring hours. You may also correct quizzes for half the remaining credit.

Final Assessment – The final will make up 30% of your grade. You will not be able to make up the final exam. That is why it is important that you record the notes from the lessons and you do the suggested homework assignments. Practice the concepts in order to master them. **Your final project is also a part of your final assessment grade.**

Lessons

Big Ideas

- 1) Applying properties of exponents to simplify expressions
- 2) Working with numbers in scientific notation
- 3) Adding, subtracting, multiplying, and factoring polynomials
- 4) Writing and solving polynomial equations to solve problems

Vocabulary

- 1) Exponential
- 2) Scientific Notation
- 3) Polynomial
- 4) Leading Coefficient
- 5) Trinomial
- 6) FOIL

Individual work

Guiding question 8:

What is an exponential function? What are some useful properties? How do we use these properties to model real world scenarios?

1) 8.1 Apply Exponent Properties Involving Products:

- ___ p.492 #'s 3 through 37 (odds)
- ___ p.494 mixed review #'s 61-73 (odds)

2) 8.2 Apply Exponent Properties Involving Quotients:

- ___ p. 498 #'s 3 through 31 (odds)
- ___ p.501 mixed review #'s 55 through 65 (odds)

___ QUIZ FOR LESSONS 8.1-8.2 (April 24th)

3) 8.3 Define and Use Zero and Negative Exponents:

- ___ p.506 #'s 3 through 43 (odds)
- ___ p.508 mixed review #'s 59 through 67 (odds)

4) 8.4 Use Scientific Notation:

- ___ p.515 #'s 3 through 27 (odds)

___ QUIZ FOR LESSONS 8.3-8.4 (May 2nd)

5) 8.5 Write and Graph Exponential Growth Functions:

- ___ p.524 #'s 5 through 27 (odds)

6) 8.6 Write and Graph Exponential Decay Functions:

- ___ p.535 #'s 3 through 31 (odds)

Assessment: Chapter 8 (May 12th)

Guiding question 9:

How do we handle functions with unlike exponential terms? How can we use properties such as the distributive property to simplify polynomial equations?

7) 9.1 Add and Subtract Polynomials:

Part 1: What is a Polynomial?

_____ p.557 #'s 3 through 16 (all)

_____ p.559 #'s 43 through 53 (odd)

Part 2: How do we Add/Subtract Polynomials?

_____ p.557 #'s 17 through 35 (all)

8) 9.2 Multiply Polynomials:

Part 1: Distributive Property, Using a Table

_____ p.565 #'s 3 through 14 (all)

_____ p.568 #'s 55-66 (all)

Part 2: Multiply Vertically, FOIL Method

_____ p.566 #'s 17 through 36 (all)

_____ QUIZ FOR LESSONS 9.1-9.2 (May 30th)**9) 9.3 Find Special Products of Polynomials:**

_____ p.572 #'s 3 through 35 (odds)

10) 9.4 Solve Polynomial Equations in Factored Form:

_____ p.578 #'s 3 through 15 (odds)

_____ p.578 #'s 27 through 37 (odds)

_____ p.580 #'s 61 through 71 (all)

11) 9.5 Factor x^2+bx+c

_____ p.586 #'s 3 through 27 (odds)

FINAL ASSESSMENT (Week of June 12th):

_____ Chapter 8, 9 Final

_____ Final Project (Completed During Week 1)