Unit 1: Computation of Functions

Important Dates

Unit 1 Quiz 01/28/2019
Solving literal equations
Solving absolute value equations
Unit 1 Test 01/31/2019
Solving literal equations
Solving absolute value equations
Solving absolute value inequalities
Using recursive and explicit arithmetic sequences.

Concepts

Absolute value is a distance from zero.
Some absolute value equations have extraneous solutions.

Arithmetic sequences:
Explicit formula $a_n = a_1 + d(n-1)$

Recursive formula: $\begin{cases} a_1 = \_\_\_\_ \\ a_n = a_1 + d \end{cases}$

Study Guide

Literal Equations: Solve for the given variable.
1. $E = mc^2 \; for \; c$ 2. $3x + 4y = 8 \; for \; x$
3. $A = P(1+r)^t \; for \; P$

Absolute Value Equations/Inequalities
Solve and graph
4. $|2x + 4| = 12$ 5. $3|x - 6| + 1 = 16$

6. $|4x - 5| < 15$ 7. $-6|5x - 1| \geq 30$

8. What are the first 3 terms of the sequence, $a_n = -2n - 5$

9. Find the 32st term of the sequence $7, 12, 17, 22, 27, 32, \ldots$

10. Write the explicit and recursive formula for the sequence $-7, -9, -11, \ldots$

Homework

Literal Equations Wksheet #1-23 odd.

Absolute value equations/ inequalities wksheet -- all problems

Generating an A. Sequence
Finding a term in an A. Sequence
Writing recursive and explicit sequences

Vocabulary

Literal Equation	Sequence
Term	Nth –term
Discrete	Continuous
Arithmetic Sequence	Recursive
Explicit	Common Difference
Absolute Value	Extraneous Solution

Websites:

www.algebra2.flippedmath.com
Sections 1.3 and 1.4

www.khanacademy.com
Arithmetic sequences

Extra Credit Project Options. Due the day of the test

See my webpage for details and rubrics

1. Write an original test and answer key for the topics covered in this unit.

2. Create a 2 to 3 minute news cast about Arithmetic Sequences.
   a. Include both recursive and arithmetic formulas
   b. How to write a formula given a sequence
   c. How to find the value of any term in the sequence
   d. How they are used or represented in real life.

3. Create a poster of your name using literal equations.

4. Write a math rap for any topic we covered in this unit.