

S. P. ARNETT MIDDLE SCHOOL
COMMON CORE ALIGNED LESSON PLAN TEMPLATE

TEACHER: Ashleigh Richardson

SUBJECT: Mathematics

DATE: March 25-29, 2024

GRADE: 8th

CCSS: Common Core Learning Standard(s) Addressed:

MATH

8.EE.C.8.c-Solve real-world and mathematical problems leading to two linear equations in two variables.

8.EE.C.8.a-Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.

8.EE.C.8.b-Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection.

ALGEBRA 1

HSN-RN.A.1-Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.

HSN-RN.A.2-Rewrite expressions involving radicals and rational exponents using the properties of exponents.

HSA-SSE.A.2-Use the structure of an expression to identify ways to rewrite it.

HSF-BF.B.3-Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology.

HSF-LE.A.2-Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).

HSA-REI.D.11-Explain why the x -coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.

HSA-SSE.A.1.b-Interpret complicated expressions by viewing one or more of their parts as a single entity.

Danielson, 1c

Monday 3/25/24

Algebra I

- Bellringer: Study for Quiz
- We Will: Ask questions from M5TA Study Guide
- Review for Eureka Math² Module 5: Topic A Quiz (Lesson 1-6)
- I Will: Take notes for the Eureka Math² Module 5: Topic A Quiz

Regular Math

- Bellringer: Solve the System of Linear Equations by Inspection
- We Will: Analyze graphs and systems of equations to determine the number of solutions.
- Eureka Math² Module 5: Lesson 10: Choosing a Solution Method
- I Will: Construct and critique arguments about the most efficient solution method.

Tuesday 3/26/24

Algebra I

- Bellringer: Study for Quiz
- We Will: Ask questions from M5TA Study Guide
- Eureka Math² Module 5: Topic A Quiz (Lesson 1-6)
- I Will: Take the Eureka Math² Module 5: Topic A Quiz

Regular Math

- Bellringer: Study for Quiz
- We Will: Review and ask questions from M5TB Study Guide
- Eureka Math² Module 5: Topic B Quiz (Lesson 6-10)
- I Will: Take the Eureka Math² Module 5: Topic B Quiz

Wednesday 3/27/24

Algebra I

- Bellringer: Writing Explicit Formulas for Geometric Sequences
- We Will: Explore situations that can be modeled with exponential functions.
- Eureka Math² Module 5: Lesson 8: Exponential Functions
- I Will: Explore exponential growth through a simulation.

Regular Math

- Bellringer: Write Equations
- We Will: Write and solve systems of linear equations for mathematical problems.
- Eureka Math² Module 5: Lesson 11: Writing and Solving Systems of Equations for Mathematical Problems
- I Will: Answer the question, "What kind of problems can we solve by using a System of Equations"?

Thursday 3/28/24

Algebra I

- Bellringer: Rewriting Exponential Expressions
- We Will: Evaluate numerical expressions in the form $b^{\frac{1}{n}}$ for positive real numbers b where n is 2 or 3.
- Eureka Math² Module 5: Lesson 9: Unit Fraction Exponents
- I Will: Compare the graphs of functions representing arithmetic and geometric sequences with the graphs of linear and exponential functions.

Regular Math

- Bellringer: Determine the Number of Solutions by Inspection
- We Will: Write and solve a system of linear equations given a historical situation.
- Eureka Math² Module 5: Lesson 12: Solving Historical Problems with Systems of Equations
- I Will: Observe and describe a single constraint to create a system of linear equations and solve the system.

Friday 3/29/24

Algebra I

- Easter Break

Regular Math

- Easter Break

Danielson, 2c, 3b, 3c,

Resources/Materials: (What texts, digital resources, & materials will be used for this lesson?)

1. Bellringer PDF
2. Other materials embedded in daily lesson/activity plan

Danielson, 2c, 3c