

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

TEACHER: Ashleigh Richardson

SUBJECT: Mathematics

DATE: May 6 – 10, 2024

GRADE: 8<sup>th</sup>

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 5/6/4**

Algebra I

- Bellringer: Calculate and compare simple and compound interest.
- We Will: Calculate and compare simple and compound interest.
- Eureka Math<sup>2</sup> Module 5: Lesson 15: Calculating Interest
- I Will: Determine that simple interest can be modeled with a linear function and compound interest can be modeled with an exponential function

Regular Math

- Bellringer
- We Will: Review and discuss systems of equations in preparation for the test tomorrow.
- Systems of Equations Review
- I Will: Listen, take notes, and participate actively in the review.

**Tuesday 5/7/24**

Algebra I

- Bellringer: Model Percent Increase and Decrease with Expressions
- We Will: Write equations for functions that represent exponential growth and use them to solve problems.
- Eureka Math<sup>2</sup> Module 5: Lesson 16: Exponential Growth
- I Will: Recognize and represent exponential growth in equations, graphs, and tables.

Regular Math

- Bellringer
- We Will: Ask questions from the review and actively listen.
- Systems of Equations Quiz
- I Will: Take the systems of equations quiz.

**Wednesday 5/8/24**

### Algebra I

- Bellringer: Calculate Percent Discount
- We Will: Write equations for functions that model exponential decay and use them to solve problems.
- Eureka Math2 Module 5: Lesson 17: Exponential Decay
- I Will: Recognize and represent exponential decay in equations, graphs, and tables.

### Regular Math

- Bellringer
- We Will: Work actively on the Linear Equation Quilt Project
- Linear Equation Quilt Project
- I Will: Work individually to start the linear equation quilt project.

### Thursday 5/9/24

#### Algebra I

- Bellringer
- Sub – Worksheet on multi-step linear equations.

#### Regular Math

- Bellringer
- Sub – Worksheet on multi-step linear equations.

### Friday 5/10/24

#### Algebra I

- Bellringer
- Sub – Systems of Equations Worksheet

#### Regular Math

- Bellringer
- Sub – Point Slope Form to Slope Intercept Form Worksheet

*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*