S. P. ARNETT MIDDLE SCHOOL

COMMON CORE ALIGNED LESSON PLAN TEMPLATE

TEACHER: Ashleigh Richardson SUBJECT: Mathematics

DATE: January 15-19, 2024 GRADE: 8th

CCSS: Common Core Learning Standard(s) Addressed:

MATH

8.NS.A.1-Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers, show that the decimal expansion repeats eventually. Convert a decimal expansion that repeats eventually into a rational number by analyzing repeating patterns.

8.EE.C.7-Solve linear equations in one variable.

8.EE.C.7.b-Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

ALGEBRA 1

9-12.A2.A-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.

9-12.A1.A-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, piecewise linear (to include absolute value), and exponential functions.

9-12.A1.F-IF.B.4-For linear, piecewise linear (to include absolute value), quadratic, and exponential functions that model a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; and end behavior.

9-12.A1.F-IF.C.9-Compare properties of two functions (linear, quadratic, piecewise linear [to include absolute value] or exponential) each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, determine which has the larger maximum.

Danielson, 1c

Monday 1/15/24

Algebra I

- MLK Day – NO SCHOOL

Regular Math

- MLK Day – NO SCHOOL

Tuesday 1/16/24

Algebra I

- Algebra I Interim

Regular Math

- Math Interim

Wednesday 1/17/24

Algebra I

- Algebra I Interim

Regular Math

- Math Interim

Thursday 1/18/24

Algebra I

- Bellringer: Evaluating Expressions Involving the Square Function
- We Will: Explain that the graph of $y = f(1\ kx)$ where $|k| > 0$ is a horizontal scaling of the graph of $y = f(x)$.
- Eureka Math^2 Module 3: Lesson 22: Building New Functions – Horizontal Scaling
- I Will: Apply horizontal scaling to graphs and identify horizontal scaling from graphs.

Regular Math
• Bellringer: Write Equivalent Expressions
• We Will: Identify the properties of equality.
• Eureka Math^2 Module 4: Lesson 2: Solving Linear Equations
• I Will: Solve multi-step linear equations in one variable with variables on both sides of the equations.

Friday 1/19/24
Algebra I
• Bellringer: Compare Two Graphs
• We Will: Transform the graph of a function by using translations, reflections, and/or scalings.
• Eureka Math^2 Module 3: Lesson 23: A Summary of Transforming the Graph of a Function
• I Will: Apply understanding of transformations to write an equation for a function given its graph.
Regular Math
• Bellringer: Write Equivalent Expressions
• We Will: Continue to practice solving linear equations with variables on both sides, but the equations now include rational numbers.
• Eureka Math^2 Module 4: Lesson 3: Solving Linear Equations with Rational Coefficients
• I Will: Solve multi-step linear equations in one variable with rational coefficients.

Danielson, 2c, 3b ,3c,

Resources/Materials: Eureka Math^2 Workbook/Instructional Book
1. Bellringer PDF
2. Other materials embedded in daily lesson/activity plan

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