

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

TEACHER: Ashleigh Richardson

SUBJECT: Mathematics

DATE: January 1-5, 2024

GRADE: 8<sup>th</sup>

CCSS: Common Core Learning Standard(s) Addressed:

**MATH**

8.G.A.3-Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. (Rotations are only about the origin, dilations only use the origin as the center of dilation, and reflections are only over the y-axis and x-axis in Grade 8.)

8.G.A.5-Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.

For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.

8.G.B.7-Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

**ALGEBRA 1**

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 1/1/24**

Algebra I

- FALL BREAK – NO SCHOOL

Regular Math

- FALL BREAK – NO SCHOOL

**Tuesday 1/2/24**

Algebra I

- FALL BREAK – NO SCHOOL

Regular Math

- FALL BREAK – NO SCHOOL

**Wednesday 1/3/24**

Algebra I

- Inservice – NO SCHOOL

Regular Math

- Inservice – NO SCHOOL

**Thursday 1/4/24**

Algebra I

- Bellringer: Graph Linear Functions
- We Will: Identify and graph step functions.
- Eureka Math<sup>2</sup> Module 3: Lesson 16: Step Functions
- I will: Notice and wonder as I compare tables of values for floor and ceiling functions.

Regular Math

- Bellringer: Write a Proportion
- We Will: Be introduced to the concept of linear perspective.
- Eureka Math<sup>2</sup> Module 3: Lesson 15: Applications of Similar Figures
- I Will: Use properties of similar figures to solve problems.

**Friday 1/5/24**

Algebra I

- Bellringer: Evaluate Step Functions from a Graph
- We Will: Model real-world situations with piecewise linear functions.
- Eureka Math<sup>2</sup> Module 3: Lesson 17: Piecewise Linear Functions in Context
- I Will: Create graphs, answer questions in context, and write equations to model each parking option.

Regular Math

- Bellringer: Use the Pythagorean Theorem
- We Will: Apply dilations to create similar right triangles.
- Eureka Math<sup>2</sup> Module 3: Lesson 16: Similar Right Triangles
- I Will: Find unknown side lengths in similar right triangles.

*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*