Topic 4 Outline Lesson Plan - GEOMETRY

**QUADRILATERALS AND COORDINTE PROOF**

**11/14-11/15 Tuesday/Wednesday – Section 9.1 – Properties of a Parallelogram (MAFS.912.G-CO.3.11)**

**Essential Question:** What can you conclude about the sides, angles, and diagonals of a parallelogram?

**Vocabulary:** quadrilateral theorem, parallelogram theorem, diagonal theorem

**Classwork:** Evaluate pg. 426-428 # 4-15 all online

**Home Learning:** Complete section 9.1, definitions

**11/16 -11/17 Thursday/Friday – Section 9.2 – Conditions for Parallelogram (MAFS.912.G-CO.3.11, SRT.2.5)**

**Essential Question:** What criteria can you use to prove that a quadrilateral is a parallelogram?

**Vocabulary:** Opposite sides of parallelogram theorem, opposite angles of a parallelogram theorem, bisecting diagonals of a parallelogram theorem

**Classwork:** Evaluate pg. 441-442 # 5-13 all online

**Home Learning:** Complete section 9.2, definitions

**11/20 – 11/21 Monday/Tuesday – Section 9.3 – Properties of Rectangles, Angles, and Diagonals of a Rectangle (MAFS.912.G-CO.3.11, SRT.2.5)**

**Essential Question:** What are the properties of Rectangles, Rhombus, and Squares?

**Vocabulary:** rectangle, properties of a rectangle, rhombus, properties of rhombus, square, properties of a square

**Classwork:** Evaluate pg. 452-454 # 15-13 all online

**Home Learning:** Complete section 9.3, definitions

**11/27 – 11/28 Monday/Tuesday – Section 9.4 – Conditions of Rectangles, Rhombuses, and Squares (MAFS.912.G-CO.3.11, SRT.2.5)**

**Essential Question:** How can you use given conditions to show that a quadrilateral is a rectangle, rhombus, or a square?

**Vocabulary:** theorem of conditions for rectangles, theorem of conditions for rhombuses

**Classwork:** Evaluate pg. 466-468 # 5-19 all online

**Home Learning:** Complete section 9.4, definitions

**11/29 – 11/30 Wednesday/Thursday – Section 10.1 – Slopes and Parallel Lines (MAFS.912.G-GPE.2.5)**

**Essential Question:** Can you use slope to solve problems involving parallel lines?

**Vocabulary:** slope criteria for parallel lines

**Classwork:** Evaluate pg. 501-503 # 1-12 all online

**Home Learning:** Complete section 10.1, definitions

**12/1 – 12/4 Friday/Monday – Section 10.2 – Slopes and Perpendicular Lines (MAFS.912.G-GPE.2.5)**

**Essential Question:** Can you use slope to solve problems involving perpendicular lines?

**Vocabulary:** slope criteria for perpendicular lines

**Classwork:** Evaluate pg. 515-518 # 1-17 all online

**Home Learning:** Complete section 10.2, definitions

**12/5 Tuesday – Section 10.3 – Coordinate Proof using distance with segments and triangles (MAFS.912.G-GPE.2.4)**

**Essential Question:** How do you write a coordinate proof?

**Vocabulary:** coordinate proof, distance formula

**Classwork:** Evaluate pg. 531-534 # 1-16 all online

**Home Learning:** Complete section 10.3, definitions

**12/6 Wednesday – Section 10.4 – Coordinate Proof using distance with quadrilateral (MAFS.912.G-CO.3.11, GPE.2.4)**

**Essential Question:** Can you use slope and distance formula in coordinate proof?

**Vocabulary:**

**Classwork:** Evaluate pg. 543-545 # 1-18 all online

**Home Learning:** Complete section 10.4, definitions

**12/7 – 12/8 Thursday/Friday – Section 10.5 – Perimeter and Area on the Coordinate Plane (MAFS.912.G-GPE.2.7)**

**Essential Question:** How do you find the perimeter and area of polygons in the coordinate plane?

**Vocabulary:** composite area, formula for: rectangle, square, triangle, parallelogram, rhombus, kite, trapezoid

**Classwork:** Evaluate pg. 559-561 # 1-13 all online

**Home Learning:** Complete section 10.5, definitions

**12/11 – Test Review**

**12/12 – Topic Assessment**