# Unit 3 - Parallel Lines and Transversals:

# Day 1:

# Learning Targets and Success Criteria:

- 1. I can define geometric terms. I know I can because:
  - o I can give a precise definition of:
    - Vertical Angle
    - Linear Pair
    - Supplementary Angles
    - Complementary Angles
    - Parallel Lines
    - Transversal
- 2. I can prove theorems about lines and angles. I know I can because:
  - o I can prove vertical angles congruent.
  - o I can prove when a transversal intersects parallel lines:
    - Alternate Interior Angles are Congruent.
    - Alternate Exterior Angles are Congruent.

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- Corresponding Angles are Congruent.
- Consecutive (Same Side) Interior Angles are Supplementary.
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.
  - o I can prove opposite angles of a parallelogram are congruent.
  - o I can prove consecutive angles of a parallelogram are supplementary.
  - o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - o I can find the measure of segments in a triangle using the midsegment theorem.
  - o I can find the measure of segments in a triangle using the medians.

## Standard: MGSE9-12.G.CO.1, 9, 10, 11

# Introduction/Connection:

Daily 10

## Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Special Types of Angles Graphic Organizer (Direct)

Angle Pair Relationships PowerPoint (Direct/Guided)

Special Angle Pairs Notes (Direct/Guided)

Special Angle Pairs Practice (Guided/Independent)

- Alternate Interior Angles
- Alternate Exterior Angles
- Consecutive Interior Angles
- Corresponding Angles

 $iXL \rightarrow C: 4$  (Independent)

2.2 Skills Practice (Angle Pairs) (Guided/Independent)

Summarizers: Discuss and correct questions they thought were difficult.

Homework: None :)

# Day 2:

# Learning Targets and Success Criteria:

- 1. I can define geometric terms. I know I can because:
  - o I can give a precise definition of:
    - Vertical Angle
    - Linear Pair
    - Supplementary Angles
    - **Complementary Angles** •
    - Parallel Lines
    - Transversal
- 2 I can prove theorems about lines and angles. I know I can because:
  - o I can prove vertical angles congruent.
  - o I can prove when a transversal intersects parallel lines:
    - Alternate Interior Angles are Congruent.

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- Alternate Exterior Angles are Congruent.
- Corresponding Angles are Congruent.
- Consecutive (Same Side) Interior Angles are Supplementary. •
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.
  - o I can prove opposite angles of a parallelogram are congruent.
  - o I can prove consecutive angles of a parallelogram are supplementary.
  - o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - o I can find the measure of segments in a triangle using the midsegment theorem.
  - o I can find the measure of segments in a triangle using the medians.

# Standard: MGSE9-12.G.CO.1, 9, 10, 11

## Introduction/Connection:

Daily 10

## Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

- Alternate Interior Angles
- Alternate Exterior Angles
- **Consecutive Interior Angles**
- . •
- - Corresponding Angles

Special Angles Practice Test (Direct/Guided)

Special Angles Test (Independent)

Activity 14 (Types of Angles with Parallel Lines and Transversals) (Guided)

3.2 Warm-up Parallel Lines (Direct)

Parallel Lines and Transversals PowerPoint (Direct/Guided)

3.2 Parallel lines Angle Relationships (Guided/Independent)

3-1 Parallel Lines Angle Relationships Reading Strategies (Independent)

**Summarizers:** Discuss and correct questions they thought were difficult.

Homework: None :)

# **Day 3:**

# Learning Targets and Success Criteria:

- 1. I can define geometric terms. I know I can because:
  - o I can give a precise definition of:
    - Vertical Angle
    - Linear Pair .
    - Supplementary Angles •
    - **Complementary Angles** •
    - Parallel Lines
    - Transversal
- I can prove theorems about lines and angles. I know I can because: 2.
  - o I can prove vertical angles congruent.
  - o I can prove when a transversal intersects parallel lines:
    - Alternate Interior Angles are Congruent.
    - Alternate Exterior Angles are Congruent. •
    - Corresponding Angles are Congruent. •
    - Consecutive (Same Side) Interior Angles are Supplementary. •
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.
  - o I can prove opposite angles of a parallelogram are congruent.
  - o I can prove consecutive angles of a parallelogram are supplementary.
  - o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - o I can find the measure of segments in a triangle using the midsegment theorem.
  - o I can find the measure of segments in a triangle using the medians.

- Alternate Interior Angles
- Alternate Exterior Angles

- Consecutive Interior Angles •
  - Corresponding Angles

# Introduction/Connection:

Daily 10

# Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Parallel Lines and Transversals Notes (Direct/Guided)

Parallel Lines and Transversals Practice (Guided/Independent)

iXLs D:3 & 4

Summarizers: Discuss and correct questions they thought were difficult.

Homework: Parallel Lines and Transversals Practice 2

# Day 4:

# Learning Targets and Success Criteria:

- 1. I can define geometric terms. I know I can because:
  - o I can give a precise definition of:
    - Vertical Angle
    - Linear Pair

- •
- Supplementary Angles
- Complementary Angles
- Parallel Lines
- Transversal
- 2. I can prove theorems about lines and angles. I know I can because:
  - o I can prove vertical angles congruent.
  - o I can prove when a transversal intersects parallel lines:
    - Alternate Interior Angles are Congruent.
    - Alternate Exterior Angles are Congruent.
    - Corresponding Angles are Congruent.
    - Consecutive (Same Side) Interior Angles are Supplementary.
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.
  - o I can prove opposite angles of a parallelogram are congruent.
  - o I can prove consecutive angles of a parallelogram are supplementary.
  - o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - o I can find the measure of segments in a triangle using the midsegment theorem.
  - o I can find the measure of segments in a triangle using the medians.

- Alternate Interior Angles
- Alternate Exterior Angles
- Consecutive Interior Angles
  - Corresponding Angles

# Introduction/Connection:

Daily 10

# Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Quadrilaterals Sorting Activity (Guided)

Parallelograms Foldable (Guided/Independent)

Parallelograms Venn Diagram Graphic Organinzer (Guided/Independent)

Properties of Parallelograms PowerPoint (Guided)

Finish iXLs

**Summarizers:** Discuss and correct questions they thought were difficult.

Homework: None :)

# <u>Day 5:</u>

# Learning Targets and Success Criteria:

1. I can define geometric terms. I know I can because:

- o I can give a precise definition of:
  - Vertical Angle
  - Linear Pair
  - Supplementary Angles
  - Complementary Angles
  - Parallel Lines
  - Transversal
- 2. I can prove theorems about lines and angles. I know I can because:
  - o I can prove vertical angles congruent.
  - o I can prove when a transversal intersects parallel lines:
    - Alternate Interior Angles are Congruent.
    - Alternate Exterior Angles are Congruent.

- Corresponding Angles are Congruent.
- Consecutive (Same Side) Interior Angles are Supplementary.
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.
  - o I can prove opposite angles of a parallelogram are congruent.
  - o I can prove consecutive angles of a parallelogram are supplementary.
  - o I can prove diagonals of a parallelogram bisect each other.

- Alternate Interior Angles
- Alternate Exterior Angles
- Consecutive Interior Angles
- Corresponding Angles

- 4. I can prove theorems about triangles. know I can because:
  - $\ensuremath{\mathsf{o}}$  I can find the measure of segments in a triangle using the midsegment theorem.
  - o I can find the measure of segments in a triangle using the medians.

#### Introduction/Connection:

Daily 10

## Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Parallelograms Notes 1 (Guided)

Parallelograms Practice 1 (Guided/Independent)

Parallelograms Notes 2 (Guided)

Parallelograms Practice 2 (Guided/Independent)

3.3A Parallel Lines WS (Guided/Independent)

Summarizers: Discuss and correct questions they thought were difficult.

Homework: None :)

# **Day 6:**

# Learning Targets and Success Criteria:

- 1. I can define geometric terms. I know I can because:
  - o I can give a precise definition of:
    - Vertical Angle
    - Linear Pair
    - Supplementary Angles
    - Complementary Angles
    - Parallel LinesTransversal
- 2. I can prove theorems about lines and angles. I know I can because:
  - o I can prove vertical angles congruent.
  - o I can prove when a transversal intersects parallel lines:
    - Alternate Interior Angles are Congruent.

- Alternate Exterior Angles are Congruent.
- Corresponding Angles are Congruent.
- Consecutive (Same Side) Interior Angles are Supplementary.
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.

- Alternate Interior Angles
- Alternate Exterior Angles
- Consecutive Interior Angles
  - Corresponding Angles

- o I can prove opposite angles of a parallelogram are congruent.
- o I can prove consecutive angles of a parallelogram are supplementary.
- o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - o I can find the measure of segments in a triangle using the midsegment theorem.
  - o I can find the measure of segments in a triangle using the medians.

#### Introduction/Connection:

Daily 10

#### Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Parallelograms Practice Quiz (Guided)

Parallelograms Quiz (Independent)

Finish 3.3A

Summarizers: Discuss and correct questions they thought were difficult.

Homework: None :)

# Day 7:

# Learning Targets and Success Criteria:

- 1. I can define geometric terms. I know I can because:
  - o I can give a precise definition of:
    - Vertical Angle
    - Linear Pair
    - Supplementary Angles
    - Complementary Angles
    - Parallel Lines
    - Transversal
- 2. I can prove theorems about lines and angles. I know I can because:
  - o I can prove vertical angles congruent.
  - o I can prove when a transversal intersects parallel lines:
    - Alternate Interior Angles are Congruent.
    - Alternate Exterior Angles are Congruent.

- Corresponding Angles are Congruent.
- Consecutive (Same Side) Interior Angles are Supplementary.
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.
  - o I can prove opposite angles of a parallelogram are congruent.
  - o I can prove consecutive angles of a parallelogram are supplementary.

- Alternate Interior Angles
- Alternate Exterior Angles
- Consecutive Interior Angles
  - Corresponding Angles

- o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - I can find the measure of segments in a triangle using the midsegment theorem.I can find the measure of segments in a triangle using the medians.

#### Introduction/Connection:

Daily 10

# Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Types of Quadrilaterals (Guided)

4-2 Quadrilateral Problems WS (Guided)

iXLs N: 2, 4, 6, 7

6.2A WS (Guided/Independent)

Summarizers: Discuss and correct questions they thought were difficult.

Homework: Special Parallelograms WS

# Day 8:

## Learning Targets and Success Criteria:

1. I can define geometric terms. I know I can because:

- o I can give a precise definition of:
  - Vertical Angle
  - Linear Pair
  - Supplementary Angles
  - Complementary AnglesParallel Lines
  - Parallel Lines
  - Transversal
- 2. I can prove theorems about lines and angles. I know I can because:
  - o I can prove vertical angles congruent.

o I can prove when a transversal intersects parallel lines:

- Alternate Interior Angles are Congruent.
- Alternate Exterior Angles are Congruent.

- Corresponding Angles are Congruent.
- Consecutive (Same Side) Interior Angles are Supplementary.
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.
  - o I can prove opposite angles of a parallelogram are congruent.

- Alternate Interior Angles
- Alternate Exterior Angles
- Consecutive Interior Angles
- Corresponding Angles

- o I can prove consecutive angles of a parallelogram are supplementary.
- o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - o I can find the measure of segments in a triangle using the midsegment theorem.
  - o I can find the measure of segments in a triangle using the medians.

#### Introduction/Connection:

Daily 10

#### Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Median and Midsegments PowerPoint (Guided)

5.4A WS (Midsegments) (Guided)

Midsegment Theorem Practice WS (Guided)

Midsegments Practice 1 (Guided/Independent)

Summarizers: Discuss and correct questions they thought were difficult.

Homework: None :)

# Day 9:

## Learning Targets and Success Criteria:

- 1. I can define geometric terms. I know I can because:
  - o I can give a precise definition of:
    - Vertical Angle
    - Linear Pair
    - Supplementary Angles
    - Complementary Angles
    - Parallel Lines
    - Transversal

2. I can prove theorems about lines and angles. I know I can because:

o I can prove vertical angles congruent.

o I can prove when a transversal intersects parallel lines:

- Alternate Interior Angles are Congruent.
- Alternate Exterior Angles are Congruent.

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- Corresponding Angles are Congruent.
- Consecutive (Same Side) Interior Angles are Supplementary.
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.

- Alternate Interior Angles
- Alternate Exterior Angles
- Consecutive Interior Angles
- Corresponding Angles

- o I can prove opposite angles of a parallelogram are congruent.
- o I can prove consecutive angles of a parallelogram are supplementary.
- o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - o I can find the measure of segments in a triangle using the midsegment theorem. o I can find the measure of segments in a triangle using the medians.

#### Introduction/Connection:

Daily 10

#### Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Midsegment Practice Quiz (Guided)

Midsegment Practice 2 (Guided/Independent)

Midsegments Quiz (Independent)

Parallel Lines, Parallelograms, and Midsegments Test Review 1 (Guided/Independent)

Parallel Lines, Parallelograms, and Midsegments Test Review 2 (Guided/Independent)

Parallel Lines, Parallelograms, and Midsegments Test Review 2 (Guided/Independent)

Summarizers: Discuss and correct questions they thought were difficult.

Homework: None :)

# **Day 10:**

## Learning Targets and Success Criteria:

- 1. I can define geometric terms. I know I can because:
  - o I can give a precise definition of:
    - Vertical Angle
    - Linear Pair •
    - Supplementary Angles ٠
    - **Complementary Angles** ٠
    - Parallel Lines
    - Transversal

2. I can prove theorems about lines and angles. I know I can because:

- o I can prove vertical angles congruent.
- o I can prove when a transversal intersects parallel lines:
  - Alternate Interior Angles are Congruent.
  - Alternate Exterior Angles are Congruent.
  - Corresponding Angles are Congruent.

- - **Corresponding Angles**
- Alternate Interior Angles
- Alternate Exterior Angles •
  - Consecutive Interior Angles •

- Consecutive (Same Side) Interior Angles are Supplementary.
- 3. I can prove theorems about Parallelograms. I know I can because:
  - o I can classify parallelograms.
  - o I can prove opposite sides of a parallelogram are parallel and congruent.
  - o I can prove opposite angles of a parallelogram are congruent.
  - o I can prove consecutive angles of a parallelogram are supplementary.
  - o I can prove diagonals of a parallelogram bisect each other.
- 4. I can prove theorems about triangles. know I can because:
  - o I can find the measure of segments in a triangle using the midsegment theorem.
  - o I can find the measure of segments in a triangle using the medians.

#### Introduction/Connection:

Daily 10

# Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Finish Test Review

Parallel Lines, Parallelograms, and Midsegments Test (Guided/Independent)

**Summarizers:** Discuss and correct questions they thought were difficult.

Homework: None :)