WESTSIDE HIGH SCHOOL

Level Up: RISE to Your Potential

24-25 Lesson Plan Template Teacher: Nkechi Chuke-Oweina Subject: Geometry Prep

Week of: DATE	**Monday** **February 3, 2025**	**Tuesday** **February 4, 2025**	**Wed./Thurs.** **February 5 & 6, 2025**	**Friday** **February 7, 2025**
TEKS	GEOM.9A	GEOM.9A	GEOM.5A	GEOM.5A
Learning Objective	SWBAT determine the lengths of sides and measures of angles in a right triangle by applying the cosine ratio to solve problems.	SWBAT determine the lengths of sides and measures of angles in a right triangle by applying the tangent ratio to solve problems.	SWBAT investigate patterns to make conjectures about interior and exterior angles and diagonals of polygons, choosing from a variety of tools.	SWBAT investigate patterns to make conjectures diagonals and interior angles of trapezoids and kites, choosing from a variety of tools.
Higher Order Thinking Questions	How can cosine ratio and its inverse be used to calculate unknown sides and angles of right triangles?	How can tangent ratio and its inverse be used to calculate unknown sides and angles of right triangles?	What are the properties of the sides, angles, and diagonals of parallelograms?	What are the properties of the sides, angles, and diagonals of kites and trapezoids?
Agenda	1. Do Now 2. Lesson – Don't Cosine - Learn about the cosine ratio.	1. Do Now 2. Lesson – Go Off On A Tangent - Learn about the tangent ratio.	1. Do Now 2. Lesson – Parallelogram Properties	1. Do Now 2 Lesson – Kites and Trapezoids - Explore and apply the properties of trapezoids.

	- Learn how to find the inverse of cosine ratio. - Application of the cosine ratio - Learn the relationship between sine and cosine. - Practice solving problems involving cosine ratio. 3. DOL- Independent Practice	- Learn how to find the inverse of tangent ratio. - Application of the tangent ratio - Learn the relationship between sine, cosine, and tangent. - Practice solving problems involving tangent ratio. 3. DOL- Independent Practice	- Parallelogram definition and types. - Go through the properties of parallelograms. - Apply the properties of parallelograms. - Practice 3. DOL- Independent Practice	- Apply midsegment theory - Explore and apply the properties of kites. - Practice 3. DOL- Independent Practice
Demonstration of Learning	Given 5 problems, students will correctly determine the lengths of sides and measures of angles in a right triangle by applying the cosine ratio to solve problems in 4 of 5 questions.	Given 5 problems, students will correctly determine the lengths of sides and measures of angles in a right triangle by applying the tangent ratio to solve problems in 4 of 5 questions.	Given 5 problems, students will correctly investigate patterns to make conjectures about interior and exterior angles and diagonals of polygons, choosing from a variety of tools in 4 of 5 questions.	Given 5 problems, students will correctly investigate patterns to make conjectures diagonals and interior angles of trapezoids and kites, choosing from a variety of tools in 4 of 5 questions.
Intervention & Extension	Completed notes for the unit posted on canvas. Video notes posted on canvas. Activity to practice concepts learned during the class.	Completed notes for the unit posted on canvas. Video notes posted on canvas. Activity to practice concepts learned during the class.	Completed notes for the unit posted on canvas. Video notes posted on canvas. Activity to practice concepts learned during the class.	Completed notes for the unit posted on canvas. Video notes posted on canvas. Activity to practice concepts learned during the class.
Resources	straightedge, blank paper, whiteboard, response cards, slide deck,	straightedge, blank paper, whiteboard, response cards, slide deck, student activity pages	straightedge, blank paper, whiteboard, response cards, slide deck, student activity pages	straightedge, compass, blank paper, whiteboard, response cards, slide deck, student activity

	student activity pages			pages