GRADE 10 MENTOR ESSENTIAL MATHEMATICS GRADE 10 – TERM II 2026

SCHOOL NAME……. TEACHERS NAME…… TERM 2

WK	LSN	STRAND	SUB-STRAND	SPECIFIC LEARNING OUTCOMES	LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS	LEARNING RESOURCES	ASSESSMENT METHODS	REF
1	1	Measurements and Geometry	**Reflection - Lines of symmetry in plane figures**	a) Identify lines of symmetry in plane figures b) Determine the number of lines of symmetry in different shapes c) Recognize symmetry in everyday objects like doors, windows and leaves	• Take a walk and collect 2D objects from the environment • Fold rectangular and square paper cut-outs to find lines of symmetry • Count number of fold lines that divide shapes into equal parts • Share findings with other groups	How do we identify lines of symmetry?	• Mentor Essential Mathematics pg. 50 • Paper cut-outs • Scissors • Various 2D objects	• Observation • Oral questions • Written assignments	
	2	Measurements and Geometry	**Reflection - Lines of symmetry in regular polygons** **Reflection - Properties of reflection**	a) Determine lines of symmetry in regular polygons b) State that regular polygons have lines of symmetry equal to number of sides c) Connect symmetry to design patterns in fabric and architecture	• Draw regular polygons and identify lines of symmetry • Trace diagrams and draw lines of symmetry • State number of lines of symmetry for various alphabets • Discuss patterns observed	What is the relationship between sides and lines of symmetry in regular polygons?	• Mentor Essential Mathematics pg. 52 • Rulers • Protractors • Plain paper • Mentor Essential Mathematics pg. 53 • Plane mirrors	• Observation • Oral questions • Written tests	
	3	Measurements and Geometry	**Reflection - Drawing images given object and mirror line**	a) Draw an image given an object and mirror line on a plane surface b) Construct perpendicular lines to locate image points c) Apply reflection skills to understanding kaleidoscopes and periscopes	• Trace figures and mirror lines on plain paper • Construct perpendicular lines from vertices to mirror line • Measure equal distances on opposite side of mirror line • Join image points to form reflected image	How do we draw the image of an object after reflection?	• Mentor Essential Mathematics pg. 54 • Plain paper • Rulers • Set squares	• Observation • Practical work • Written tests	

	4	Measurements and Geometry	**Reflection - Reflection along x = 0**	a) Draw an image after reflection along the line x = 0 b) Determine coordinates of image points when reflected along y-axis c) Connect reflection to creating symmetric designs and logos	• Plot triangles on Cartesian plane • Reflect points along line x = 0 • Record coordinates of object and image points • Observe pattern in coordinates after reflection	What happens to coordinates when reflecting along x = 0?	• Mentor Essential Mathematics pg. 56 • Graph paper • Rulers • Pencils	• Observation • Oral questions • Written assignments	
	5	Measurements and Geometry	**Reflection - Reflection along y = 0**	a) Draw an image after reflection along the line y = 0 b) Determine coordinates of image points when reflected along x-axis c) Apply reflection concepts to architectural symmetry and graphic design	• Plot squares and rectangles on Cartesian plane • Reflect shapes along line y = 0 • Compare coordinates before and after reflection • Discuss the transformation rule for y = 0 reflection	What happens to coordinates when reflecting along y = 0?	• Mentor Essential Mathematics pg. 58 • Graph paper • Rulers • Calculators	• Observation • Oral questions • Written tests	
2	1	Measurements and Geometry	**Reflection - Reflection along y = x** **Reflection - Drawing mirror line given object and image on plane surface**	a) Draw an image after reflection along the line y = x b) Determine coordinates of image points when reflected along y = x c) Use reflection in creating tessellations and artistic patterns	• Plot triangles on Cartesian plane • Draw line y = x and reflect points • Record and compare coordinates • Establish the rule for reflection along y = x	What happens to coordinates when reflecting along y = x?	• Mentor Essential Mathematics pg. 57 • Graph paper • Rulers • Pencils • Mentor Essential Mathematics pg. 60 • Plain paper • Compasses	• Observation • Practical work • Written assignments	
	2	Measurements and Geometry	**Reflection - Drawing mirror line on Cartesian plane**	a) Draw the mirror line given an object and its image on Cartesian plane b) Identify the equation of the mirror line c) Connect mirror line concepts to coordinate geometry applications	• Plot objects and their images on Cartesian plane • Join corresponding vertices • Construct perpendicular bisectors • Determine equation of mirror line	How do we determine the equation of a mirror line?	• Mentor Essential Mathematics pg. 61 • Graph paper • Rulers • Compasses	• Observation • Oral questions • Written assignments	
	3	Measurements and Geometry	**Reflection - Application in**	a) Apply reflection in real-life situations	• Discuss uses of reflection in real life	How is reflection used	• Mentor Essential Mathematics pg. 63	• Observation	