



Grade 10 General Stream Scheme of Work, Term 2, Academic Year 2022-2023

Purpose

- to define the **required** General Stream Mathematics Student Learning Outcomes to be covered during the term for this grade
- to **recommend** the pace at which the Student Learning Outcomes are to be covered. The term's content is broken down into nine teaching weeks, allowing the coverage of topics within each week to be flexible.

Assessment

- Assessment details for Term 2 will be communicated separately.

Teachers should incorporate the Standards for Mathematical Practice (SMPs) in their instruction when and where appropriate. The Standards for Mathematical Practice are

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Why are the Standards for Mathematical Practice important?

The Standards for Mathematical Practice set expectations for using mathematical language and representations to reason, solve problems, and model in preparation for careers and a wide range of college majors.

Week 1: Jan. 2 – Jan. 6, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
<p align="center">know your students, establish classroom routines, and finalize class lists. It is also an opportunity to review prerequisite concepts and skills which students will need for Grade 10 and to administer teacher-created diagnostics</p>				
Chapter 5	الدوائر Circles	Lesson 1	الدوائر والمحيط Circles and Circumference	MAT.3.10.02.001 Identify parts of circles and use in solving problems on relations between circles MAT.3.10.02.002 Solve problems involving the circumference of a circle
Chapter 5	الدوائر Circles	Lesson 2	قياس الزوايا والأقواس Measuring Angles and Arcs	MAT.3.10.02.003 Identify central angles, major arcs, minor arcs, and semicircles, and find their measures MAT.3.10.02.004 Find arc lengths

Week 2: Jan. 9 – 13, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
Chapter 5	الدوائر Circles	Lesson 3	الأقواس والأوتار Arcs and Chords	MAT.3.10.02.005 Recognize and use relationships between arcs and chords MAT.3.10.02.006 Recognize and use relationships between arcs, chords, and diameters

Chapter 5	الدوائر Circles	Lesson 4	الزوايا المحيطة Inscribed Angles	MAT.3.10.02.007 Find measures of inscribed angles MAT.3.10.02.008 Find measures of angles of inscribed polygons
Chapter 5	الدوائر Circles	Lesson 5	المماسات Tangents	MAT.3.10.02.009 Use properties of tangents MAT.3.10.02.010 Solve problems involving circumscribed polygons

Week 3: Jan. 16 – 20, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
Chapter 5	الدوائر Circles	Lesson 6	القاطع والمماس وقياس الزوايا Secants, Tangents, and Angle Measures	MAT.3.10.02.011 Find measures of angles formed by lines intersecting on or inside a circle MAT.3.10.02.012 Find measures of angles formed by lines intersecting outside a circle
Chapter 5	الدوائر Circles	Lesson 7	Special Segments in a Circle القطع الخاصة في الدائرة	MAT.3.10.02.013 Find measures of segments that intersect in the interior of a circle MAT.3.10.02.014 Find measures of segments that intersect in the exterior of a circle

Week 4: Jan. 23 – 27, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
----------	------------	------------	--------------	--------

Chapter 5	الدوائر Circles	Lesson 8	معادلة الدائرة Equations of Circles	MAT.3.10.02.015 Write the equation of a circle MAT.3.10.02.016 Graph a circle in the coordinate plane
Chapter 5	الدوائر Circles	Lesson 9	مساحة الدائرة والقطاع الدائري Areas of Circles and Sectors	MAT.3.10.02.017 Expand the study of areas of circles MAT.3.10.02.018 Expand the study of areas of sectors of circles
Chapter 6	التناسب والتشابه Proportions and Similarity	Lesson 1	النسب والتناسب Ratios and Proportions	MAT.3.05.04.001 Write ratios MAT.3.05.04.002 Write and solve proportions

Week 5: Jan. 30 – Feb. 3, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
Chapter 6	التناسب والتشابه Proportions and Similarity	Lesson 2	المضلعات المتشابهة Similar Polygons	MAT.3.05.04.003 Use proportions to identify similar polygons MAT.3.05.04.004 Solve problems using the properties of similar polygons
Chapter 6	التناسب والتشابه Proportions and Similarity	Lesson 3	المثلثات المتشابهة Similar Triangles	MAT.3.05.04.005 Identify similar triangles using the AA Similarity Postulate and the SSS and SAS Similarity Theorems MAT.3.05.04.006 Use similar triangles to solve problems

Week 6: Feb. 6 – 10, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
Chapter 6	التناسب والتشابه Proportions and Similarity	Lesson 4	المستقيمات المتوازية والأجزاء المتناسبة Parallel Lines and Proportional Parts	MAT.3.05.04.007 Use proportional parts within triangles MAT.3.05.04.008 Use proportional parts with parallel lines
Chapter 6	التناسب والتشابه Proportions and Similarity	Lesson 5	أجزاء المثلثات المتشابهة Parts of Similar Triangles	MAT.3.05.04.009 Recognize and use proportional relationships of corresponding angle bisectors, altitudes, and medians of similar triangles MAT.3.05.04.010 Use the Triangle Angle Bisector Theorem
Chapter 6	التناسب والتشابه Proportions and Similarity	Lesson 6	Similarity تحويلات التشابه Transformations	MAT.3.05.04.011 Identify similarity transformations MAT.3.05.04.012 Verify similarity after a similarity transformation

Week 7: Feb. 13 – 17, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
Chapter 6	التناسب والتشابه Proportions and Similarity	Lesson 7	مقياس الرسم والنماذج المقياسية Scale Drawing and Models	MAT.3.05.04.013 Interpret scale models MAT.3.05.04.014 Use scale factors to solve problems

Chapter 7	المثلثات قائمة الزاوية وحساب Right Triangles and المثلثات Trigonometry	Lesson 1	Geometric Mean الوسط الهندسي	<ol style="list-style-type: none"> 1. Find the geometric mean between two numbers. 2. Solve problems involving relationships between parts of a right triangle and the altitude to its hypotenuse
-----------	--	----------	------------------------------	---

Week 8: Feb. 20 – 24, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
Chapter 7	المثلثات قائمة الزاوية وحساب Right Triangles and المثلثات Trigonometry	Lesson 2	The Pythagorean Theorem and Its Converse فيثاغورس وعكسها	<ol style="list-style-type: none"> 1. Use the Pythagorean Theorem. 2. Use the Converse of the Pythagorean Theorem.
Chapter 7	المثلثات قائمة الزاوية وحساب Right Triangles and المثلثات Trigonometry	Lesson 3	Special المثلثات القائمة الخاصة Right Triangles	<ol style="list-style-type: none"> 1. Use the properties of 45° - 45° - 90° triangles. 2. Use the properties of 30° - 60° - 90° triangles.

Week 9: Feb. 27 – Mar. 3, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
Chapter 7	المثلثات قائمة الزاوية وحساب Right Triangles and المثلثات Trigonometry	Lesson 4	Trigonometry حساب المثلثات	<ol style="list-style-type: none"> 1. Find trigonometric ratios using right triangles. 2. Use trigonometric ratios to find angle measures in right triangles.

Chapter 7	المثلثات قائمة الزاوية وحساب Right Triangles and المثلثات Trigonometry	Lesson 5	زوايا الارتفاع والانخفاض Angles of Elevation and Depression	1. Solve problems involving angles of elevation and depression. 2. Use angles of elevation and depression to find the distance between two objects.
------------------	---	-----------------	--	--

Week 10: March 6 –10, 2023 Week 11: March 13 –17, 2023 Week 12: March 20 –24, 2023
Term 2 Revision/EOT Exams