Numeracy Assessment

As part of the updated graduation requirements, students in the 2018 Graduation Program (students graduating in June 2019 and beyond) will be required to write a provincial numeracy assessment.

Students are able to re-write the assessment up to two times following their first attempt. Students can write the numeracy assessment from January 21 – 25, 2019 and from June 21 – 27, 2019

We recommend that

- any grade 12 students who have not written this assessment, or who would like to rewrite, register for the January or June, 2019 assessment
- grade 11 students write the assessment after they have completed their grade 11 math course either in January or June, 2019.
- grade 10 students may wish to write the assessment after they have completed the math 11 course in January or June 2020. Students may write the assessment if they have completed their math 10 course, but it may be to their advantage to delay writing the numeracy assessment until they have completed their math 11 course.

The following are links to additional information.

Sample Assessment (online)

- Sample Assessment Key (selected response) (pdf)
- Sample Assessment Scoring Guide and Student Exemplars (written response) (pdf)

Sample Situation and Questions: Giving Out Bonuses (pdf)

- Answer Key (pdf)
- Sample Response (pdf)

Numeracy Processes Collaborative Learning Guide (pdf)

There is also a video series that explains each of the five processes students will be engaged in while writing the numeracy assessment (interpret, apply, solve, analyze, communicate).

Assessment Design

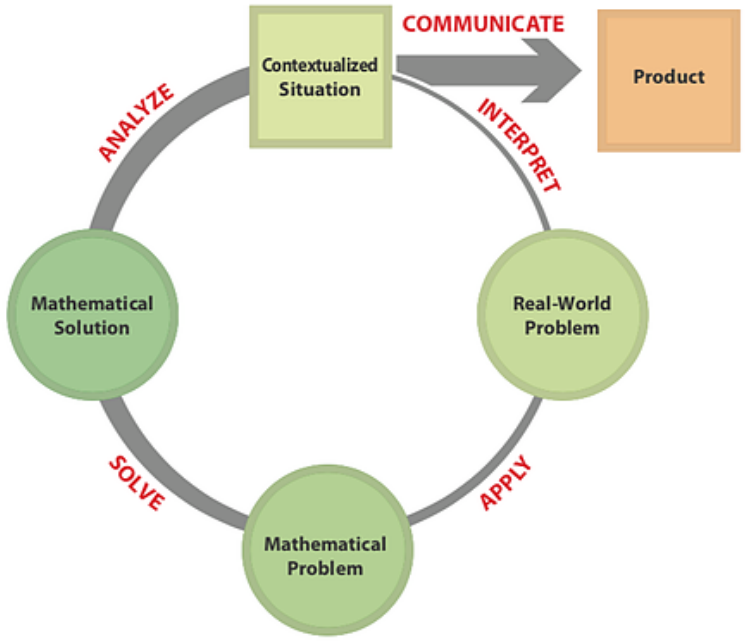
Ability in numeracy is developed throughout the curriculum and is applied in many contexts. The curricular competencies across a number of Areas of Learning have informed the definition of numeracy and its related processes. The following definition is at the heart of the Graduation Numeracy Assessment and has guided its development:

Numeracy Numeracy is the ability, willingness, and perseverance to interpret and apply mathematical understanding to solve problems in contextualized situations, and to analyze and communicate these solutions in ways relevant to the given context.

Process for Solving Numeracy Tasks

The figure below illustrates the numeracy processes involved in solving a numeracy task.

- The task starts with a **contextualized situation** to provide context.
- The contextualized situation is then interpreted to identify the **real-world problem**. From that, one or more mathematical approaches are applied ("mathematized") to create a relationship (or several) to solve the **mathematical problem**.
- The mathematical problem is solved, and the resulting **mathematical solution** is analyzed and evaluated in context to determine if another cycle is needed.
- Once the contextualized situation is resolved, a solution or recommendation is communicated.



One may need to go through the cycle several times or go back and forth between the numeracy processes prior to communicating a solution or recommendation.

(This process is based on a mathematical modelling cycle. See, for example, Perrenet & Zwaneveld, 2012.)