Curricular Competencies for Precalculus 11

The curricular competencies for this course are divided into four main categories.

1. **Reasoning and Modelling:**

**🡪** develop thinking strategies to solve puzzles and play games

🡪 Explore, analyze and apply mathematical ideas using reason, technology and other tools

🡪 Estimate reasonably and demonstrate fluent, flexible and strategic thinking about number

🡪 Model with mathematics in situational contexts

🡪 Think creatively and with curiosity and wonder when exploring problems

2. **Understanding and Solving**

**🡪** Develop, demonstrate and apply conceptual understanding of mathematical ideas through play, story, inquiry and problem solving

🡪 Visualize to explore and illustrate mathematical concepts and relationships

🡪 Apply flexible and strategic approaches to solve problems

🡪 Solve problems with persistence and a positive disposition

🡪 Engage in problem-solving experiences connected with place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community and other cultures.

3. **Communicating and Representing**

🡪 Explain and justify mathematical ideas and decisions in many ways

🡪 Represent mathematical ideas in concrete, pictorial and symbolic forms

🡪 Use mathematical vocabulary and language to contribute to discussions in the classroom

4. **Connecting and Reflecting**

🡪 Reflect on mathematical thinking

🡪 Connect mathematical concepts with each other, with other areas and with personal interests

🡪 Use mistakes as opportunities to advance learning

🡪 Incorporate First Peoples worldviews, perspectives, knowledge and practices to make connections with mathematical concepts

Students will be assessed on these 4 main categories via projects, quizzes and tests.