

BIG IDEAS

Proportional comparisons can be made among right triangles, using trigonometry.

Understanding **operations** helps when working with formulae and unit conversions.

Many **relationships** can be modelled and interpreted using graphs.

Varying the transversal allows us to notice **angle relationships**.

Analyzing simulations and **data** allows us to notice trends and relationships.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Reasoning and analyzing</p> <ul style="list-style-type: none"> Use reasoning and logic to analyze and apply mathematical ideas Estimate reasonably Demonstrate fluent and flexible thinking of number Use tools or technology to analyze relationships and test conjectures Model mathematics in contextualized experiences <p>Understanding and solving</p> <ul style="list-style-type: none"> Develop, demonstrate, and apply conceptual understanding of mathematical ideas Visualize to explore and illustrate mathematical concepts and relationships Apply flexible strategies to solve problems in both abstract and contextualized situations Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures <p>Communicating and representing</p> <ul style="list-style-type: none"> Communicate mathematical thinking in many ways Use mathematical vocabulary and language to contribute to mathematical discussions Represent mathematical ideas in a variety of ways Explain and justify mathematical ideas 	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> puzzles and games for computational fluency create, interpret, and critique graphs primary trigonometric ratios metric and imperial measurement and conversions solving problems involving surface area and volume angles central tendency experimental probability financial literacy: gross and net pay

Learning Standards (continued)

Curricular Competencies	Content
<p>Connecting and reflecting</p> <ul style="list-style-type: none"> • Reflect on mathematical thinking • Use mathematics to support personal choices • Connect mathematical concepts to each other and to other areas and personal interests • Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts 	

DRAFT