



# Apply Trigonometric Relationships in Solving Problems

Achieved	Merit	Excellence
Apply trigonometric relationships in solving problems.	Apply trigonometric relationships, using <u>relational thinking</u> , in solving problems.	Apply trigonometric relationships, using <u>extended abstract thinking</u> , in solving problems.
<u>Relational Thinking</u> - Involves selecting and carrying out a logical sequence of steps, connecting different concepts or representations, demonstrating understanding of concepts, and relating findings to a context.		
<u>Extended Abstract Thinking</u> - Involves devising a strategy, identifying relevant concepts, developing logical reasoning, forming generalizations, and communicating mathematical insight.		

## Trigonometric Relationships

The relationships required in this standard include:

- Length of an arc of a circle
- Area of a sector of a circle
- Sine rule
- Cosine rule

## Problems

The problems will be set in real-life or mathematical contexts and provide opportunities to apply knowledge and understanding of trigonometric concepts and methods.

## Key Vocabulary

Students are expected to understand and use terms related to Sequences and Series, such as:

- Arc
- Sector
- Adjacent
- Cosine
- Hypotenuse
- Sine
- Opposite