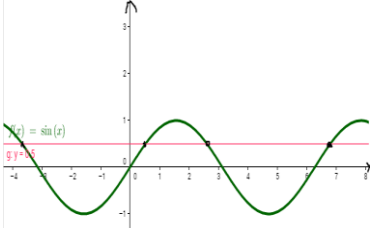


## Goals



By the end of this unit, students:

- understand the concepts and techniques in trigonometry, real and complex numbers, and matrices
- apply reasoning skills and solve problems in trigonometry, real and complex numbers, and matrices
- communicate their arguments and strategies when solving problems
- construct proofs of results
- interpret mathematical information and ascertain the reasonableness of their solutions to problems

**This week:**

Applications of trigonometric functions to model periodic phenomena:

- model periodic motion using sine and cosine functions and understand the relevance of the period and amplitude of these functions in the model.
- Exams

## Theoretical Components

**Read through examples and make notes.**

Knowledge checklist for Test 1:

- Solving trig equations
- Graphing trig equation
- Compound Angles (sum, difference, double angle, half angle, product to sum)
- Graphs of reciprocal trig functions
- convert sums  $a \cos x + b \sin x$  to  $R \cos(x + \text{or} - \alpha)$  or  $R \sin(x + \text{or} - \alpha)$
- Trig modelling (applications)
- Trig Identities (proof)

## Practical Components

Check Google Drive TEST 1 Revision folder:

- Attempt as many questions.
- Prepare your summary notes for the test.

## Investigation

**None this week!**

**Exam in WK08.**

**QFO**

Quiz/Forum/Other

Mathspace quiz: Test 1 Revision, is due on 4<sup>th</sup> Sept.