MATH M06: Trigonometry

Course Objectives (COR)

- Identify special triangles and their related angle and side measures.
- Evaluate the trigonometric function of an angle in degree and radian measure.
- Manipulate and simplify a trigonometric expression.
- Solve trigonometric equations, triangles, and applications.
- Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs.
- Evaluate and graph inverse trigonometric functions.
- Prove trigonometric identities.
- Convert between polar and rectangular coordinates and equations.
- Calculate powers and roots of complex numbers using DeMoivre's Theorem.
- Graph polar equations.
- Represent a vector (a quantity with magnitude and direction) in the form $< a,b >$ and $ai+bj$.

Course Learning Outcomes (CLO)

- Solve a quadratic trigonometric equation.
- Use the Law of Sines or Cosines to solve a triangle.
- Graph a trigonometric function of the type y=A sin Bx + C.