



MATHEMATICS ASSESSMENT TASK NOTIFICATION

YEAR 12 EXTENSION 1 MATHEMATICS 2022

Task Number:	1
Topic/s:	Harder Advanced Questions on Further Differentiation and Geometric Applications of Differentiation, Derivative of Inverse Trigonometric and Algebraic Functions, Further Trigonometric Equations and Trigonometric Graphs
Weighting:	25%
Due Date:	Wednesday 8 th December
Time:	Afternoon Session (90 minutes + 5 minutes reading time)
Venue:	T.B.A

Outcomes assessed:

- MA12-1 Uses detailed algebraic and graphical techniques to critically construct, model and evaluate arguments in a range of familiar and unfamiliar contexts.
- MA12-3 Applies calculus techniques to model and solve problems.
- MA12-5 Applies the concepts and techniques of periodic functions in the solution of problems involving trigonometric graphs.
- MA12-6 Applies appropriate differentiation methods to solve problems.
- MA12-9 Chooses and uses appropriate technology effectively in a range of contexts, models and applies critical thinking to recognise appropriate times for such use.
- MA12-10 Constructs arguments to prove and justify results and provides reasoning to support conclusions which are appropriate to the context.
- ME12-1 Applies techniques involving proof or calculus to model and solve problems.
- ME12-3 Applies advanced concepts and techniques in simplifying expressions involving compound angles and solving trigonometric equations.
- ME12-6 Chooses and uses appropriate technology to solve problems in a range of contexts.
- ME12-7 Evaluates and justifies conclusions, communicating a position clearly in appropriate mathematical forms.

Task: IC

Please Note:

1. The College policy regarding malpractice, including cheating and plagiarism, late submission and absenteeism will apply. Please refer to moodle.pmaclism.catholic.edu.au (Assessment Tasks – Rules and Procedures). Stage 6 students should also refer to their *2022 Assessment Handbooks*.
2. Email is NOT an accepted form of assessment task submission.
3. If you are going to be away for any reason, including school based activities, you must fill in a “Planned Absence Notification” form and submit to the Assistant Principal Curriculum or the Leader of Curriculum. This form can be found at <http://moodle.pmaclism.catholic.edu.au/mod/page/view.php?id=17637>.