



Year 12 Mathematics Advanced Assessment Task 1 – 2023

TOPIC: Transformations of graphs	MARKS: 39 Marks
SUBMISSION REQUIREMENTS: Term 4 – Week 9 - Friday, <u>8th December 2023</u> This assignment is to be handed to your class teacher as you enter the room Period 2.	WEIGHTING: 20 %
OUTCOMES TO BE ASSESSED: MA12-1 : uses detailed algebraic and graphical techniques to critically construct, model and evaluate arguments in a range of familiar and unfamiliar contexts MA12-5 : applies the concepts and techniques of periodic functions in the solution of problems involving trigonometric graphs. 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.	
DIRECTIONAL VERBS: Apply – use, utilise, employ in a particular situation Calculate – ascertain, evaluate, determine from given facts, figures or information Model – simplified description of a system or process to assist calculations and predictions	
TASK DESCRIPTION: This task explores the modelling of transformations of functions using trigonometric functions. It consists of four parts: Part 1: Sound Waves – 4 Marks Part 2: Finding hidden shapes – 16 Marks Part 3: Exponential Modelling – 19 Marks	
ASSESSMENT CRITERIA: Students will complete the <u>assignment on A4 paper</u> and submit this document for marking on or before the due date. Students are to take screen shots of any work done on the computer and add this to their assignments. Alternately you may submit your assignment digitally via email to Deepika.dayal3@det.nsw.edu.au or through Canvas.	