

Chris Huson	Lesson Plan 11th Grade IB Math 16 February 2022	
Learning Target	I can calculate simple interest.	
Learning Standards	HSF.IF.C.7 Use exponential functions to solve problems	
Materials	Chromebook, Calculator plot; Overhead doc-cam	
Vocabulary	Future value, present value, rate, exponential growth, depreciation, similar, scale factor, dilation, transformation, collinear	
	Teacher Actions	Student Actions
Do Now: Given the problem situation, label a diagram. State the functional equation for the situation, substitute and solve the algebra, and check the solution.	Teacher poses problem, monitors individual progress and assists as appropriate. Teacher highlights key take-aways and connects to lesson.	Students work in pairs, comparing answers. Students present and discuss solutions.
Procedure: Applying graphical and algebraic formal methods.	Teacher assesses homework (completion basis, with spot-check of selected problems). Teacher presents lesson concepts: Discussion of lesson concepts. Format: "I do, we do, you do". Teacher connects new practices to existing body of knowledge, assesses level of understanding.	Students present explanation of problem situation, interpreting results. Students take notes, respond to questions and each other, ask questions. Students complete practice problems, share on board.
Assessment	Writing to learn: Use proper graphical and algebraic notation in the beginnings of a formal proof format	
Homework Complete Deltamath online problems	Exercises to practice and review; Complete exercises, working 30 to 60 minutes, using notebook, online video instruction and worked examples.	
Differentiation	Open questioning: Is there more than one approach to the problem? How do we methodically create the algebraic representation of a situation? Challenge homework problems	
Grouping Group heterogeneously, seating chart.	Rapid exposure and independent homework: Class at regular pace: *IEP, **ELL	