## YEAR 12 – MATHEMATICS (Week 9)

Subject	Mathematics
Class/ Section	Year 12 – Batch A, B and C
Week	17 <sup>th</sup> May to 21 <sup>st</sup> May
Work send to students by	Group email / Google classroom / Zoom
Total number of lessons per week	6
	PURE MATH- Ch 13(INTEGRATION)
	13.2 – Indefinite integrals
Units	13.3 – Finding functions
	Assessment – Statistics (Year 2) Ch. 1 – Regression, correlation and hypothesis Testing Ch. 2 – Conditional Probability
Lessons 1 & 2 –Live Zoom lessons	13.2 – Indefinite integrals
	<u>Learning objective</u> – To integrate polynomials.
	Intended Learning Outcomes
	Students will be able to understand indefinite integrals.
	Students will be able to apply the concept of indefinite integration in integrating polynomials which are in terms of x or t or with combination of other variables.
	Students will be able to explore using indefinite integrals that finding the area under the graph is same as finding anti-derivative.
Task	To complete the questions assigned from the Textbook(pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.

	1. Power point presentation
Resources	2. Statistics and Mechanics Year 2
	3. <u>https://www.physicsandmathstutor.com/</u>
	4. <u>https://www.drfrostmaths.com/</u>
	5. <u>https://www.examsolutions.net/</u>
	6. <u>https://www.youtube.com/watch?v=MMv-027KEqU</u>
	7. <u>https://www.youtube.com/watch?v=8jg6LTr4V8o</u>
Lessons 3 & 4 –Live Zoom lessons	13.3 – Finding functions
	<u>Learning objective</u> – To find f(x), given f'(x) and a point on
	the curve.
	Intended Learning Outcomes
	Students will be able to find the constant of integration.
	Students will be able to find the equation of the curve with the given derivative of y with respect to $x$ that passes through the given point.
	Students in groups will be able to explore how to apply the concept learnt in real life situations. This will be a extended task and students will explain their findings in next week's zoom class and then present worked examples in Google classroom.
Task	To complete the questions assigned from the Textbook(pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.
Resource	1. Power point presentation
	2. Statistics and Mechanics Year 2
	3. <u>https://www.physicsandmathstutor.com/</u>
	4. <u>https://www.drfrostmaths.com/</u>
	5. <u>https://www.examsolutions.net/</u>
	6. <a href="https://www.youtube.com/watch?v=x_sQLLtkjIM">https://www.youtube.com/watch?v=x_sQLLtkjIM</a>
	7. <u>https://www.youtube.com/watch?v=gN0Zmw4kl_8</u>

Lessons 5 –	Assessment on:
Work will be assigned in Google	Ch 1 Depression correlation and how other is Testing
Classroom	Ch. $1 - \text{Regression}$ , correlation and hypothesis Testing Ch. $2 - \text{Conditional Probability}$
Lesson 6 will be asynchronous	
wherein work will be assigned in	Objective:
Google classroom which will be matched to the student's ability	Assessing the concept of .
matched to the student's ability.	Exponential models, Measuring correlation, Hypothesis testing
	for zero correlation
Task	Set notation, conditional probability, conditional probabilities in venn diagrams, probability formulae and tree diagrams.
	To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.
Resources	
	1. Power point presentation
	2. Pure Math Year 1 / AS
	3. <u>https://www.physicsandmathstutor.com/</u>
	4. <u>https://www.drfrostmaths.com/</u>
	5. <u>https://www.examsolutions.net/</u>
	6. <u>https://www.youtube.com/watch?v=fTh5GnDqZfw</u>
	7. <a href="https://www.youtube.com/watch?v=-Q3NCPW5mlA">https://www.youtube.com/watch?v=-Q3NCPW5mlA</a>
	8. <u>https://www.youtube.com/watch?v=6IG8nGJg81w</u>