

YEAR 12 – MATHEMATICS (Week 28)

Subject	Mathematics (Pure Math & Stats)
Class/ Section	Year 12 – Batch 1, 2 and 3
Week	7 th March – 11 th March 2021
Work send to students by	Group email / Google classroom / Zoom
Total number of lessons per week	6
Units	<p>PURE MATH- Ch13(Integration) 13.1(Integrating x^n) 13.2(indefinite Integrals) 13.3 (Finding functions) 13.4(definite Integrals) STATISTICS – Book 2 – Ch 2 (Conditional Probability)</p>
Lessons 1 –Live Zoom lesson	<p>PURE MATH- Ch13(Integration) 13.1(Integrating x^n) 13.2(indefinite Integrals)</p> <p><u>Learning objective</u> : Find y given dy/dx for x^n .Integrating polynomials .</p> <p><u>Intended Learning Outcomes</u> - Students will be able integrate polynomial, by applying the rule of integration separately to each term.</p>
Tasks	<p>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.</p>
Resources	<ol style="list-style-type: none"> 1. Power point presentation 2. Pure Mathematics Year 1 / AS 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/

<p>Lesson 2 - Live Zoom lesson</p> <p>Tasks</p> <p>Resources</p>	<p>PURE MATH- Ch13(Integration) 13.3 (Finding functions) <u>Learning objective</u> - Find $f(x)$, given $f'(x)$ and a point on the curve.</p> <p><u>Intended Learning Outcomes</u> – Students will be able to find the constant of integration integrate the function, substitute the values (x, y) of a point on the curve, or the value of the function at a given point $f(x) = k$, into the integrated function Solve the equation to find c.</p> <p>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.</p> <ol style="list-style-type: none"> 1. Power point presentation 2. Pure Mathematics Year 1 / AS 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/
<p>Lesson 3- Live Zoom lesson</p> <p>Tasks</p> <p>Resources</p>	<p>PURE MATH- Ch13(Integration) 13.4(definite Integrals) <u>Learning objective</u> - Evaluate a definite integral. <u>Intended Learning Outcomes</u> –Students will be able to calculate an integral between two limits. A definite integral usually produces a value .</p> <p>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.</p> <ol style="list-style-type: none"> 1. Power point presentation 2. Pure Mathematics Year 1 / AS 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/
<p>Lessons 4 –Live Zoom lesson</p>	<p>Book 2 Chapter 2: 2.2 – Conditional Probability</p> <p><u>Learning objective</u> – To understand conditional probability.</p> <p><u>Intended Learning Outcomes</u></p> <p>--Students will be able to understand that probability of an event can change depending on the outcome of a previous event. Situations like this can be modelled using conditional probability. The probability that B occurs given that A has already occurred is written as $P(B A)$. Similarly, $P(B A')$ describes the probability of B occurring given that A has not occurred. For independent events, $P(A B) = P(A B') = P(A)$, and $P(B A) = P(B A') = P(B)$. We can solve some problems involving conditional probability by considering a restricted sample space of the outcomes where one</p>

<p>Tasks</p> <p>Resource</p>	<p>event has already occurred.</p> <p>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.</p> <ol style="list-style-type: none"> 1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a-levelmaths/edexcel/edexcel-a-level-maths-past-papers/
<p>Lessons 5 –Live Zoom lesson</p> <p>Tasks</p> <p>Resource</p>	<p>Book 2 Chapter 2: 2.3 – Conditional Probability in Venn Diagrams</p> <p><u>Learning objective</u> – To solve conditional probability problems using two-way tables and Venn diagrams.</p> <p><u>Intended Learning Outcomes</u></p> <p>--Students will be able to find conditional probabilities from a Venn diagram by considering the section of the Venn diagram that corresponds to the restricted sample space.</p> <p>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.</p> <ol style="list-style-type: none"> 1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a-levelmaths/edexcel/edexcel-a-level-maths-past-papers/
<p>Lessons 6 –Live Zoom lesson</p> <p>Tasks</p> <p>Resource</p>	<p>Assessment in Statistics for 40 marks.</p> <p>Portion: Book 1 – Chapter 7 – Hypothesis testing Book 2 – Chapter 1 – Regression Correlation</p> <p>Questions are assigned in Google classroom and students are monitored in Zoom.</p>