YEAR 12 – MATHEMATICS (Week 32)

Subject	**Mathematics (Pure Math & Stats)**
Class/ Section	**Year 12 – Batch 1, 2 and 3**
Week	**25th April -29th April 2021**
Work send to students by	**Group email / Google classroom / Zoom**
Total number of lessons per week	**6**
Units	**PURE MATH- Ch14 (Exponentials and logarithms)** **14.5 Laws of logarithms** **14.6 Solving equations using logarithms** **STATISTICS – Book 2 – Ch 3 (The Normal Distribution)**
Lessons 1 –Live Zoom lesson **Tasks** **Resources**	**PURE MATH- Ch14 (Exponentials and logarithms)** **14.5 Laws of logarithms** **Learning objective** : To recall and apply the laws of logarithms. **Intended Learning Outcomes** - Students will be able to recall and apply the laws of logarithms. Expressions involving more than one logarithm can be rearranged or simplified. 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 2. Pure Mathematics Year 1 / AS 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. *https://www.examsolutions.net/a-levelmaths/edexcel/edexcel-a-level-maths-past-papers/*
Lesson 2- Live Zoom lesson **Tasks** **Resources**	**PURE MATH- Ch14 (Exponentials and logarithms)** **14.6 Solving equations using logarithms** **Learning objective** – To solve equations of the form a ^x=b. **Intended Learning Outcomes**Students will be able to use logarithms and calculator to solve equations of the form a ^ x = b. 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 2. Pure Mathematics Year 1 / AS

	3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. *https://www.examsolutions.net/a-levelmaths/edexcel/edexcel-a-level-maths-past-papers/*
Lessons 3 –Live Zoom lesson **Tasks** **Resource**	Book 2 Chapter 3: 3.5 – Finding μ and σ. **Learning objective** – To find the unknown means and/or standard deviations for a normal distribution. **Intended Learning Outcomes** --Students will be able to find an unknown mean or standard deviation for a normally distributed variable. 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 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/
Lessons 4 & 5 –Live Zoom lesson **Tasks** **Resource**	Book 2 Chapter 3: 3.6 – Approximating a binomial distribution. **Learning objective** – To approximate a binomial distribution using a normal distribution. **Intended Learning Outcomes** --Students will be able to consider the binomial random variable $X \sim B(n, p)$. It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X \sim B(n, p)$ can be approximated by the normal distribution $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ 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. 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/
Lessons 6 –GOOGLE CLASS ROOM **Tasks** **Resource**	**To do problems involving Ch14 (Exponentials and logarithms)** **Intended Learning Outcome:** **By the end of the lesson students will be able to do problems from the Exercises 14 H(Page 331 -333,335) QUESTION 3, 5 ,8** **Mixed exercise – Chapter 14 (Exponentials and logarithms)** **Question 12** **Work will be assigned in Google Classroom.** **Text Book :** Pure Mathematics Year 1 / AS