

YEAR 12 – MATHEMATICS (Week 3)

Subject	Mathematics
Class/ Section	Year 12 – Batch A, B and C
Week	5th April to 9th April
Work send to students by	Group email / Google classroom / Zoom
Total number of lessons per week	6
Units	14.1 – Exponential Functions 14.2 – $y = e^x$ 14.3 – Exponential Modelling 14.4 – Logarithms 14.5 – Laws of logarithms 14.6 – Solving equations using logarithms
Lessons 1 & 2	Revision of the following topics 14.1 – Exponential Functions 14.2 – $y = e^x$ Learning objective – (i) To sketch graphs of the form $y = a^x$, $y = e^x$ and transformations of these graphs. (ii) To differentiate e^{kx} and understand why this result is important.
Lesson 3 & 4	Revision topic: 14.3 – Exponential Modelling 14.4 – Logarithms Learning objective – (i) To use and interpret models that use exponential functions (ii) To recognise the relationship between exponents and logarithms.
Task	Complete the textbook and worksheet questions in the notebook.
Resource	1. Power point presentation

	<ol style="list-style-type: none"> 2. Pure Math Year 1 / AS 3. https://www.physicsandmathstutor.com/ 4. https://studywell.com/maths/pure-maths/exponential-logarithmic-functions/growth-and-decay/ 5. https://www.khanacademy.org/math/algebra2/x2ec2f6f830c9fb89:logs/x2ec2f6f830c9fb89:exp-models/v/solving-exponential-model-word-problems-1 6. https://www.alamo.edu/contentassets/afe30946fa58450c89840c1173f3b9d0/exponential/math1314-exponential-equations-base-e.pdf 7. https://youtu.be/n2tohOieKYw 8. https://teachers.henrico.k12.va.us/math/HCPSAlgebra2/Documents/10-2/2006_10_2.ppt
<p>Lessons 5 & 6</p> <p>Task</p> <p>Resources</p>	<p>14.5 – Laws of logarithms</p> <p>Learning objective – (i) To recall and apply the laws of logarithm</p> <p>Complete the textbook and worksheet questions in the notebook.</p> <ol style="list-style-type: none"> 1. Power point presentation 2. Pure Math Year 1 / AS 3. https://www.physicsandmathstutor.com/ 4. https://studywell.com/wp-content/uploads/2018/03/SolomonDecayQuestions.pdf 5. https://studywell.com/wp-content/uploads/2018/03/SolomonDecaySolutions.pdf 6. https://youtu.be/-8K1nNNb3zQ 7. https://youtu.be/ofw47dK47Js 8. https://pmt.physicsandmathstutor.com/download/Maths/A-level/C2/Topic-Qs/Edexcel-Set-1/C2%20%20Exponentials%20and%20logs%20-%20Exponential%20equations.pdf 9. https://youtu.be/23el04fJ8Ww