

## YEAR 13 – MATHEMATICS (Week 11)-2020-2021

<b>Subject</b>	<b>Mathematics</b>
<b>Class/ Section</b>	<b>Year 13 – Batch A, B and C</b>
<b>Week</b>	<b>15<sup>th</sup> November to 19<sup>th</sup> November</b>
<b>Work send to students by</b>	<b>Google classroom</b>
<b>Total number of lessons per week</b>	<b>3</b>
<b>Units</b>	<b>-Chapter 6 book 2- Projectiles (Completion) Statistics book 2- The normal distribution</b>
<b>Lessons 1,2,3 –Live Zoom lesson along with face to face instruction for students present on a particular day</b>  <b>Work will be assigned in google classroom which will be matched to the students ability.</b>	<p>Learning objectives –</p> <ul style="list-style-type: none"><li>- To be able to derive the formulae for Range and time of flight of a projectile.</li><li>- To solve problems involving projectiles projected at an angle using the derived formulae</li><li>- To understand the properties of a normal distribution</li><li>- To find probabilities for a normal distribution</li></ul> <p><b><u>Intended Learning Outcomes</u></b></p> <ul style="list-style-type: none"><li>- Students will be able to use trigonometric identities and derive the equation of the path of the trajectory, Range and time of flight formulae.</li><li>- Students will be able to draw a diagram for the normal distribution and identify the correct areas</li><li>- Students will be able to use the normal cumulative distribution function on the calculator and calculate relevant probabilities.</li></ul>

**Tasks**

Complete the questions assigned from the Mechanics 2 text book on Projectiles at an angle (Ex6D and Mixed Ex6); Normal distribution Ex 3A &3B in the notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.

**Resources**

1. Edexcel Statistics & Mechanics book 1 textbook
2. <https://www.physicsandmathstutor.com>