



مدرسة القديسة مريم الكاثوليكية الثانوية - دبي  
ST. MARY'S CATHOLIC HIGH SCHOOL, DUBAI

**YEAR 12 – PURE MATHEMATICS (Week 4)-2021-2022**

<b>Subject</b>	<b>Mathematics (PURE)</b>
<b>Class/ Section</b>	<b>Year 12 – Batch 1, 2 and 3</b>
<b>Week</b>	<b>19<sup>th</sup> September to 23<sup>rd</sup> September</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>Pure Math Straight line graphs (chapter 5-section 5.3,5.4, 5.5) Circles (chapter 6- section 6.1,6.2)</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 student's ability.</b>	<b><u>Specific Learning objectives</u></b> - Know and use the rules for parallel and perpendicular gradients. -Solve length and area problems on coordinate grids. -Use straight line graphs to construct mathematical models. -Find the midpoint of a line segment -Find the equation of perpendicular bisector to a line segment -Know how to find the equation of a circle.

<p><b>Tasks/Activities</b></p>	<p><b><u>Specific Intended Learning Outcomes</u></b></p> <ul style="list-style-type: none"> <li>- Students will be able to know and use the rules for parallel and perpendicular gradients.</li> <li>- Students will be able to solve length and area problems on coordinate grids. <ul style="list-style-type: none"> <li>- Students will be able to use straight line graphs to construct mathematical models.</li> </ul> </li> <li>-Students will be able to find the midpoint of a line segment.</li> <li>-Students will be able to find the equation of perpendicular bisector to a line segment.</li> <li>-Students will be able to know how to find the equation of a circle.</li> </ul> <p style="margin-left: 40px;">The Teacher will recall using the rules for parallel and perpendicular gradients. Solving length and area problems on coordinate grids.</p> <p style="margin-left: 40px;">The teacher will introduce to use straight line graphs to construct mathematical models.</p> <p style="margin-left: 40px;">The teacher will recall finding the midpoint of a line segment, to find the equation of perpendicular bisector to a line segment.</p> <p style="margin-left: 40px;">The Teacher will introduce to find the equation of a circle.</p> <p style="margin-left: 40px;">Students will explore other examples and the implementation of straight line graphs in real life.</p> <p>Complete the questions assigned from the pure mathematics 1 text book in the notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.</p>
<p><b>Assessment Criteria/ Essential questions</b></p>	<p><b>Essential Question that are according to the Pearson Edexcel specification</b></p> <p>e. g Core Mathematics C12</p> <p style="margin-left: 40px;">Advanced Subsidiary October 2017 question 10</p> <p>For example, assessment objectives expected by the board with respect to the above question is listed below.</p> <ul style="list-style-type: none"> <li>AO1: select and correctly carry out routine procedures</li> <li>AO2: use mathematical language and notation correctly</li> <li>AO3: translate problems in mathematical and non-mathematical contexts into mathematical processes</li> </ul> <ol style="list-style-type: none"> <li>1.Edexcel Pure Mathematics Book 1 Textbook</li> <li>2.Ppt on the topic.</li> <li>3.<a href="https://www.physicsandmathstutor.com">https://www.physicsandmathstutor.com</a></li> <li>4.<a href="https://www.drfrostmaths.com/">https://www.drfrostmaths.com/</a></li> <li>5.<a href="https://www.examsolutions.net/">https://www.examsolutions.net/</a></li> </ol>
<p><b>Resources</b></p>	<p><b>Essential Question that are according to the Pearson Edexcel specification</b></p> <p>e. g Core Mathematics C12</p> <p style="margin-left: 40px;">Advanced Subsidiary October 2017 question 10</p> <p>For example, assessment objectives expected by the board with respect to the above question is listed below.</p> <ul style="list-style-type: none"> <li>AO1: select and correctly carry out routine procedures</li> <li>AO2: use mathematical language and notation correctly</li> <li>AO3: translate problems in mathematical and non-mathematical contexts into mathematical processes</li> </ul> <ol style="list-style-type: none"> <li>1.Edexcel Pure Mathematics Book 1 Textbook</li> <li>2.Ppt on the topic.</li> <li>3.<a href="https://www.physicsandmathstutor.com">https://www.physicsandmathstutor.com</a></li> <li>4.<a href="https://www.drfrostmaths.com/">https://www.drfrostmaths.com/</a></li> <li>5.<a href="https://www.examsolutions.net/">https://www.examsolutions.net/</a></li> </ol>