



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

YEAR 11 – MATHEMATICS (Week 4) 2021-2022

Subject	Mathematics
Class/ Section	Year 11
Week	19th September to 23rd September
Work send to students by	Google classroom
Total number of lessons per week	5
Unit 13	More Trigonometry
Key Vocabulary	Reference angle, asymptote
Lessons 1,2,3,4,5 –Live Zoom lesson along with face to face instruction for students present on a particular day Work will be assigned in Google classroom which will be matched to the students ability.	<u>Specific Learning objectives</u> <ul style="list-style-type: none">• To solve trigonometric equations by sketching graphs and by using reference angle• To do the problems from the worksheet involving Trigonometric equations and Trigonometric values of any angle.• Recognise and sketch Quadratic and Cubic graphs <u>Specific Intended Learning Outcomes</u> By the end of the lesson students will be able to <ul style="list-style-type: none">• To solve trigonometric equations by sketching graphs and by using reference angle• To do the problems from the worksheet involving Trigonometric equations and Trigonometric values of any angle.

- **Recognise and sketch Quadratic and Cubic graphs**

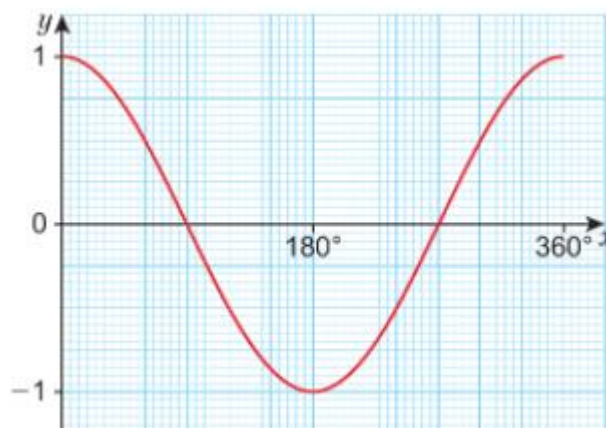
Tasks/Activities

**Assessment Criteria/
Essential questions**

The teacher will introduce the concepts using PPT.
Complete the questions assigned from the text book and the worksheet . Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.

1.

Here is the graph of $y = \cos x$ for $0^\circ \leq x \leq 360^\circ$.



Use the graph to estimate a solution to $\cos x = -0.6$.

2.

- Sketch the graph of $y = \tan x$ in the interval 0° to 720° .
- Given that $\tan 30^\circ = \frac{1}{\sqrt{3}}$ solve the equation $3 \tan x = \sqrt{3}$ in the interval 0° to 720° .

Assessment objectives expected by the board with respect to the above questions are listed below.

AO1: Use and apply standard techniques

AO2: Reason, interpret and communicate mathematically

AO3: Solve problems within mathematics and in other contexts.

Resources

**Text Book : Edexcel GCSE (9- 1)Mathematics Higher
Student Book
PPT and worksheet**