



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

YEAR 11 – MATHEMATICS (Week 3) 2021-2022

Subject	Mathematics
Class/ Section	Year 11
Week	12th September to 16th 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 do problems involving Pythagoras and Trigonometry in 3D• To know the graph of Sine, Cosine and Tangent function.• To draw and understand the properties of Sine, Cosine and Tan graphs• To find the – Sine value, Cosine Value and Tan value of any angle. <u>Specific Intended Learning Outcomes</u> By the end of the lesson students will be able to <ul style="list-style-type: none">• To do problems involving Pythagoras and Trigonometry in 3D• To know the graph of Sine, Cosine and Tangent

Tasks/Activities

**Assessment Criteria/
Essential questions**

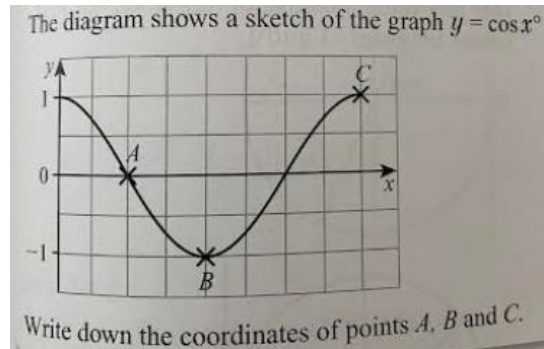
Resources

function.

- **To draw and understand the properties of Sine, Cosine and Tan graphs**
- **To find the – Sine value, Cosine Value and Tan value of any angle.**

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.



2.

The graph of $y = \sin x$ repeats every 360° in both directions.

a Sketch the graph of $y = \sin x$ for $0^\circ \leq x \leq 540^\circ$.

b Use your sketch to find

i $\sin 540^\circ$ ii $\sin 450^\circ$.

c The exact value of $\sin 60^\circ$ is $\frac{\sqrt{3}}{2}$. Write down the exact value

i $\sin 420^\circ$ ii $\sin 480^\circ$.

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.

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