



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

YEAR 9 – MATHEMATICS (Week 3) -2021-2022

Subject	Mathematics
Class/ Section	Year 9
Week	19th September to 23rd September
Work send to students by	Google classroom
Total number of lessons per week	6
Unit/Topic	Unit 1.7 – Surds Unit 2.1 – Algebraic indices
Key Vocabulary	Irrational numbers, surds, rationalise, algebraic indices
Lessons 1,2,3,4,5,6 –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 student's ability.	<u>Specific Learning objectives</u> <ul style="list-style-type: none">- To understand the difference between rational and irrational numbers.- To simplify a surd.- To rationalise a denominator.- To use the rules of indices to simplify algebraic expressions. <u>Specific Intended Learning Outcomes</u> <ul style="list-style-type: none">-Students will be able to solve problems involving surds.- Students will be able to rationalise a denominator.- Students will be able to apply the laws of indices.

Tasks/Activities

The teacher will recap the previous knowledge of students .The teacher will introduce the concepts using PPT.
Complete the questions assigned from the text book in the notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.

**Assessment Criteria/
Essential questions****Reasoning / Problem-solving**

Ben types $\frac{1}{\sqrt{7}}$ into his calculator. His display shows $\frac{\sqrt{7}}{7}$.

a Show that $\frac{1}{\sqrt{7}} = \frac{\sqrt{7}}{7}$.

b Use your calculator to check your answers from Q14.

Exam-style question

a Simplify $3c^2d^3 \times 4cd^{-2}$ (3 marks)

b $x^4 \times x^n = x^7$
Work out n . (1 mark)

Assessment objectives expected by the board with respect to the above question is listed below.

AO1: use and apply standard techniques

AO2: Reason, interpret and communicate mathematically

AO3: solve problems within mathematics and in other contexts

Resources

1. Text Book – Edexcel GCSE (9- 1)Mathematics Higher Student Book
2. PPT on the topic
3. Active learn