

مدرسة القديسة مريم الكاثوليكية الثانوية - دبي

ST. MARY'S CATHOLIC HIGH SCHOOL, DUBAI

Lesson Plan

Subject	Mathematics
Class/ Section	Year 7 A to F
Week	12 th September to 16 th September
Work send to students by	Google classroom
Total number of lessons per week	5
Unit/Topic	2.2- Negative numbers2.4- Squares and square roots2.5- More powers and roots
Key Vocabulary	Square root
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 student's ability.	 Specific Learning objectives Add, subtract, multiply and divide positive and negative numbers Use index notation for squares and square roots. Calculate with squares and square roots. Find the positive and negative square root of a square number Estimate square roots of non square numbers less than 100.
Tasks/Activities	 Specific Intended Learning Outcome By the end of the lessons student will be able to: Add, subtract, multiply and divide positive and negative numbers. Understand index notation for squares and square roots. Calculate with squares and square roots. Find the positive and negative square root of a square number Estimate square roots of non square numbers less than 100. Ask students to call out the square numbers from 1² to 15² and list them (answers only) on the board. Explain that the square root is the inverse of a square number. Point at the square numbers (in order and then at random) and ask students to tell you the square root. 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**

Work out

a
$$4^2 - 12$$

$$h 3 + 9^2$$

c
$$4 \times 3^2 + 5$$

d
$$\frac{6^2}{4}$$
 - 15

e
$$\sqrt{49} + 5 \times 8$$

work out
a
$$4^2 - 12$$
 b $3 + 9^2$ **c** $4 \times 3^2 + 5$
d $\frac{6^2}{4} - 15$ **e** $\sqrt{49} + 5 \times 8$ **f** $\frac{\sqrt{100}}{2} + 10^2$

Work out

a
$$50 - 3^3$$

b
$$4^3 + 6^2$$

$$6 \times 2^3 - 18$$

a
$$50 - 3^3$$
 b $4^3 + 6^2$ **c** $6 \times 2^3 - 18$ **d** $4 \times \sqrt[3]{1000} - 35$ **e** $\frac{20}{\sqrt[3]{125}} - 2^2$

e
$$\frac{20}{\sqrt[3]{125}}$$
 - 2^2

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- Interpret results in the context of the given problem.

Resources

- Text book questions and worksheet
- PPT