YEAR 8 MATHEMATICS WEEK 5 2020 (TERM 2)

Year: 8   **Date: Monday 15 June 2020**

STRAND: NUMBERS   **TOPIC: Directed Numbers**

LESSON OUTCOME: At the end of this lesson student(s) should be able to multiply numbers between +10 and -10.

Instructions: Hi dear Parents/Guardians and students - In this Lesson students are going to **multiply numbers between +10 and -10** by doing the selected questions for **Exercise 2.8**.

[*Note that all the Quizzes/Test and or Assignment will be based on the selected questions for each exercise. These lessons are designed for **one hour per Lesson**.]*

What to do: Do the following selected questions

Exercise 2.8: Q1 (h, i, m, n, o)

Solutions: Solutions will be available online via

Multiplying Directed Numbers

In order for us to be able to multiply positive and negative numbers, let's look at the following rules.

A.	+	x	+	=	+	1.	When the signs are the same, the answer is positive.
B.	-	x	-	=	+		
C.	+	x	-	=	-	2.	When the signs are different, the answer is negative.
D.	-	x	+	=	-		

Example 1   Evaluate $^-2$ x $^-3$

$^-2$ x $^-3$

Same sign   so, $^-2$ x $^-3$ = $^+6$

Example 2   Evaluate $^-3$ x $^+4$

$^-3$ x $^+4$

Different signs so, $^-3$ x $^+4$ = $^-12$

Example 3   Evaluate $^-3$ x   7   x $^-2$

$^-3$ x   7   x $^-2$ (work from left to right)

($^-3$ x   7)   x $^-2$ (different signs)

= $^-21$ x $^-2$ (same signs)

=   42

EXERCISE 2.8

1.   Evaluate

a. $^-12$ x $^-6$

b. 7 x $^-5$

c. $^-8$ x $^-10$

d. $^-11$x $^-4$

e. $^-20$ x $^-7$

f. $^-6$ x $^-5$

g. $^-1\frac{1}{2}$ x -6

h. $^-2\frac{1}{4}$ x $^-8$

i. $^-10\frac{1}{2}$ x $^-4$

j.   6 x $^-4$ x $^-3$

k. $^-8$ × 12 × 1

l.   6 × 8 × $^-2$

m. $^-4$ × $^-5$ × $^-5$

n. 4 × $^-6$ × 2

o. $^-2$ × $^-8$ × $^-2$