YEAR 8 MATHEMATICS WEEK 5 2020 (TERM 2)

Year: 8 **Date: Tuesday 16 June 2020**

STRAND: NUMBERS **TOPIC: Directed Numbers**

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

Instructions: Hi dear Parents/Guardians and students - In this Lesson students are going to **divide numbers between +10 and -10** by doing the selected questions for **Exercise 2.9**.

[*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 2.9: Q1; Q15; Q18; Q25; Q34; Q37; Q45

Solutions: Solutions will be available online via
https://www.facebook.com/centralschoolemergencyforum/posts/108720557434149

2. Copy the table below into your exercise book and answer the question.

This multiplication table below contains 42 mistakes. Shade in each box that contains a mistake.

YOU WILL END UP WITH A FAMOUS FARMING EXPRESSION!

X	2	-4	-9	6	3	8	-1	4	-8	-2	-6	7	-5	9	-7
-3	6	-12	-27	-18	9	-24	-3	12	-24	6	-18	-21	-15	27	-21
9	-18	-36	-81	54	-27	72	9	36	-72	-18	54	63	45	81	63
-6	12	-24	54	-36	18	-48	-6	24	48	12	-36	-42	-30	-54	-42
5	-10	-20	-45	30	-15	40	5	20	-40	-10	30	35	25	45	35
-7	14	-28	-63	-42	21	-56	-7	28	-56	14	-42	-49	-35	63	-49

Dividing Directed Numbers

To enable us to divide positive and negative numbers, let us study these rules.

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

Example 1 Find the answer to $18 \div {}^{-}6$

$^{+}18 \div {}^{-}6$

Different sign so, $18 \div {}^{-}6 = {}^{-}3$

Example 2 Find the answer to ${}^{-}8 \div {}^{-}2$

${}^{-}8 \div {}^{-}2$

Same sign so, ${}^{-}8 \div {}^{-}2 = {}^{+}4$

EXERCISE 2.9

1. $49 \div {}^{-}7$
2. ${}^{-}14 \div {}^{-}2$
3. ${}^{-}24 \div 3$
4. ${}^{-}25 \div 5$
5. $16 \div {}^{-}8$
6. ${}^{-}21 \div {}^{-}7$
7. ${}^{-}35 \div 7$
8. $24 \div {}^{-}12$
9. ${}^{-}48 \div {}^{-}6$
10. ${}^{-}30 \div 10$
11. $64 \div {}^{-}8$
12. ${}^{-}72 \div {}^{-}8$
13. ${}^{-}8 \div {}^{-}2$
14. ${}^{-}8 \times {}^{+}2$
15. ${}^{+}24 \times {}^{-}2$
16. ${}^{-}30 \div {}^{-}15$
17. ${}^{-}30 \div {}^{-}2$
18. ${}^{+}100 \div {}^{-}5$
19. ${}^{-}21 \div {}^{-}7$
20. ${}^{+}21 \times {}^{-}3$
21. ${}^{-}1 \div {}^{-}10$
22. ${}^{+}40 \div {}^{-}4$
23. ${}^{-}50 \div {}^{-}15$
24. ${}^{-}25 \div {}^{-}2$
25. ${}^{-}2 \times {}^{-}2 \times 2$
26. ${}^{-}33 \div {}^{-}11$
27. ${}^{-}45 \div 9$
28. $100 \div 25$
29. ${}^{-}64 \div {}^{-}2$
30. $35 \div {}^{-}5$
31. ${}^{-}65 \div 5$
32. ${}^{-}5 \times {}^{-}20$
33. ${}^{-}8 \times 2\frac{1}{2}$
34. ${}^{+}14 \times \frac{1}{2}$
35. ${}^{-}18 \times {}^{-}2$
36. ${}^{-}49 \div 2$
37. ${}^{-}7 \times {}^{-}2 \times {}^{-}1$
38. ${}^{+}68 \div {}^{-}4$
39. $50 \div {}^{-}2$
40. ${}^{-}28 \div {}^{-}2$
41. ${}^{-}63 \div {}^{+}9$
42. ${}^{-}44 \div {}^{-}4$
43. ${}^{-}70 \div 2$
44. $6 \times {}^{-}2$
45. ${}^{-}120 \div {}^{-}60$

Order of Operations

Reminder:

Do
1. **All brackets first**
2. **All times (x) and division (÷) from left to right**
3. **All plus (+) and minus (-) from left to right.**

Example 1 Simplify (-2 -4) x 2

(-2 -4) becomes -6

= -6 x 2

= -12

Example 2 Simplify ${}^{-}1 \times {}^{-}7 - (24 \ {}^{-}2)$

do the bracket first

= ${}^{-}1 \times {}^{-}7 - {}^{-}12$

= $7 - {}^{-}12$

= $7 + 12$

= 19