

Unit 1: Review – Integers & Rationals [NO CALCULATORS]**1.1 Integer Operations**

Recall your number sets:

Counting/Natural Numbers

Whole Numbers

Integers

Addition of Integers

What happens when we add two positives?

Ex. $2 + 4 =$

$11 + 9 =$

$18 + 25 =$

What happens when we add two negatives?

Ex. $-2 + (-4) =$

$(-9) + (-11) =$

$-13 + (-8) =$

What happens when we add a positive and a negative?

Ex. $2 + (-4) =$

$(-9) + 11 =$

$-13 + 10 =$

Tips!

- You can switch the order of any addition question.

Ex. $-2 + (-4) =$

$(-9) + 11 =$

$-13 + 10 =$

- Think of a number line: Adding a positive means move to the _____

Adding a negative means move to the _____

Ex. $5 + (-3)$

$-7 + 4$

**Subtraction of Integers**

- ❖ The operation that causes more problems!

Ex. $9 - 4 =$

$5 - 9 =$

$-3 - 12 =$

$4 - (-5) =$

Tip!

- Switch subtraction questions into addition questions by adding the opposite.

Ex. $-2 - 4$ $(-9) - (-4)$ $3 - 10$ $5 - (-12)$
 $=$ $=$ $=$ $=$

Multiple steps?

Ex. $5 + (-6) - (-2)$ $3 - (-4) + (-2) - (-4)$
 $=$ $=$

Multiplying & Dividing Integers

- ❖ Know the rules!

1. $\times$ or $\div$ two integers with same signs [ie. both + or both -] the result will be _____
2. $\times$ or $\div$ two integers with opposite signs [ie. one + & one -] the result will be _____

Ex. $2 \times (-3) =$ $-15 \div (-5) =$ $-3 \cdot 4 =$

$$\frac{-42}{6} =$$

$$-7(-12) =$$

Ex. $-3(-1)(-6)$ *odd # of negatives – can we predict the sign of the result?
 $=$