

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

BLOCK: \_\_\_\_\_

## Lesson 9 – Addition of Integers

Integers can be added by using one of the two methods.

### METHOD #1: Using a number line

- By moving left or right on a number line
- Position ourselves on the first integer given in the question and the next integer tells us whether we travel left or right on the number line
- A **POSITIVE** integer means we move to the **RIGHT**
- A **NEGATIVE** integer means we move to the **LEFT**

<p>EXAMPLE #1: <math>(+4) + (-5) = -1</math></p> <p>A number line from -3 to 4. An orange arrow starts at 4 and moves left to -1. The result -1 is boxed in orange.</p> <p>We start at +4 and move 5 spaces to the left.</p>	<p>EXAMPLE #2: <math>(-2) + (+5) = +3</math></p> <p>A number line from -2 to 5. A blue arrow starts at -2 and moves right to 3. The result +3 is boxed in blue.</p> <p>We start at -2 and move 5 spaces to the right.</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### METHOD #2: This second method involves **TWO RULES** for addition which are:

- 1.) If the signs of the integers are the **SAME**, **ADD** the numbers and keep the same signs.

$$(+2) + (+6) = +8$$

both are positive

$$(-3) + (-9) = -12$$

both are negative

- 2.) If the signs of the integers are **DIFFERENT**, **SUBTRACT** the numbers and take the sign of the numerically larger number.

$$(-7) + (+2) = -5$$

$$7 - 2 = 5$$

$$(+2) + (-8) = -6$$

$$8 - 2 = 6$$

numerically bigger #

signs are different

numerically bigger #

signs are different