

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Adding Integers

**Rule 1: The sum of two positive integers will be positive.**

$$2 + 3 = 5$$

$$7 + 8 = 15$$

$$12 + 14 = 26$$

**Rule 2: The sum of two negative integers will be negative.**

*Add the absolute values of both numbers.*

$$-6 + -7 = -13$$

$$-4 + -3 = -7$$

$$-18 + -15 = -33$$

**Rule 3: The sum of integers with different signs will use the sign of the integer with the greatest absolute value.**

*Find the absolute value of both numbers;*

*then subtract the smaller from the larger number.*

Equation	Absolute Values	Subtract	Sign of the Sum	Solve
$-5 + 8 = \underline{\quad}$	(5), (8)	$(8) - (5) = (3)$	+	$-5 + 8 = 3$
$3 + -4 = \underline{\quad}$	(3), (4)	$(4) - (3) = (1)$	-	$3 + -4 = -1$
$-9 + 7 = \underline{\quad}$	(9), (7)	$(9) - (7) = (2)$	-	$-9 + 7 = -2$
$13 + -6 = \underline{\quad}$	(13), (6)	$(13) - (6) = (7)$	+	$13 + -6 = 7$

*Hint: When adding a positive number, move right on the number line.  
When adding a negative number, move left on the number line.*

## Subtracting Integers

**Rule: To subtract an integer, add its opposite.**

Equation	Add the Opposite	Solution
$5 - 6 = \underline{\quad}$	$5 + -6 = \underline{\quad}$	-1
$5 - -6 = \underline{\quad}$	$5 + 6 = \underline{\quad}$	11
$-5 - 6 = \underline{\quad}$	$-5 + -6 = \underline{\quad}$	-11
$-5 - -6 = \underline{\quad}$	$-5 + 6 = \underline{\quad}$	1