

# NEGATIVE NUMBERS



# NEGATIVE NUMBERS

- any number less than zero.
- symbolized by a minus or dash (sign)
- These numbers are shown on the left side of the number line.



- They are read with the term “negative” before the number.  
*Example:* Negative one, negative seven, negative eleven
- They represent the loss or absence of something.
- They are the result of subtracting a larger number from a smaller number.

If no sign is shown on the number, that means the number is positive.

# OPERATIONS ON NEGATIVE NUMBERS

## Addition

- ***Negative Integers***

-- The numbers are added and the negative sign in the sum is retained.

*Example:*  $-5 + (-9) = -14$

- ***Negative and Positive Integers***

-- The numbers are subtracted. The sign of the larger number will be used in the sum.

*Example:*  $-5 + 9 = 4$

$5 + (-9) = -4$

# OPERATIONS ON NEGATIVE NUMBERS

## Subtraction

- ***Negative Integers***

-- If the subtrahend is negative, convert its sign to positive. Therefore, subtract both numbers. The sign of the larger number will be used in the difference.

*Examples:*  $-5 - (-9) = -5 + 9 = 4$

$$-9 - (-5) = -9 + 5 = -4$$

- ***Negative and Positive Integers***

-- If the minuend is negative, add the numbers and put a negative sign in the difference.

*Examples:*  $-9 - (5) = -14$

$$-5 - (9) = -14$$

-- If the subtrahend is negative, convert its sign to positive. Therefore, add both numbers.

*Examples:*  $9 - (-5) = 9 + 5 = 14$

$$5 - (-9) = 5 + 9 = 14$$

# OPERATIONS ON NEGATIVE NUMBERS

## Multiplication

- ***Negative Integers***

-- The product of two negative factors is a positive integer.

*Example:*  $-9 \times (-5) = 45$

- ***Negative and Positive Integers***

-- The product of negative and positive factors is a negative integer.

*Examples:*  $-9 \times 5 = -45$

$9 \times (-5) = -45$

# OPERATIONS ON NEGATIVE NUMBERS

## Division

- ***Negative Integers***

-- The quotient of two negative integers is a positive integer.

*Example:*  $-45 \div (-5) = 9$

- ***Negative and Positive Integers***

-- The quotient of negative and positive integers is a negative integer.

*Examples:*  $-45 \div 5 = -9$

$45 \div (-5) = -9$