INTEGER NUMBERS

Lea el texto y complete los espacios usando las siguientes opciones

Integer numbers - number line - Whole numbers - Natural numbers-

- _____ are counting numbers from one to infinity.
  We use the letter $\mathbb{N}$ to refer to the set of all natural numbers.

$$\mathbb{N} = \{1, 2, 3, 4, ..., 10, 11, ...\}$$

- _____ are counting numbers from zero to infinity.

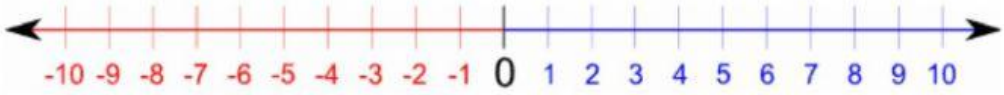
$$\{0, 1, 2, 3, 4, ..., 10, 11, ...\}$$

- _____ are positive numbers and negative numbers, but not fractions or decimals.

  We use the letter $\mathbb{Z}$ to refer to the set of all integer numbers.

$$\mathbb{Z} = \{..., 5, 4, 3, 2, 1, 0, 1, 2, 3, 4, 5,...\}$$

- We use a _____ to show integer numbers:



Properties of Integers

Lee cuidadosamente los enunciados. Luego elige la propiedad correspondiente.
Finalmente une las descripciones con sus ejemplos

$a \cdot (b + c) = a \cdot b + a \cdot c$

Example: $-6 \cdot (-2 + 3) = 12 - 18$

1) Changing the order of the addends does not change the sum.
This property does not apply to subtraction or division

$a \cdot 0 = 0$

Example: $(-7) \cdot 0 = 0$

2)Changing the **grouping** of the addends does not change the sum.

$a + 0 = a$

3) Multiplying a sum by a number is the same as multiplying each addend by that number and then adding the two products.

$(a + b) + c = a + (b + c)$

Example: $(-5 + 8) + 1 = -5 + (8 + 1)$

For addition: Adding 0 and any number does not change the value of the number.

$a + b = b + a$

Example: $6 + 4 = 4 + 6$

For multiplication: Multiplying 1 and any number does not change the value of the number.

$a + (-a) = 0$

Example: $9 + (-9) = 0$

The sum of any integer and its additive inverse is 0
The inverse property for multiplication does not exist for the set of integers.
Fractions are not included in the set of integers.

$a \cdot 1 = a$

The product of 0 and any number is 0.