

Multiplication of Integers

We can find the product of any two integers using the repeated addition method.

⇒ Multiplication of Integers Rules

1. The product of a Positive Integer and a Negative Integer is negative.

Examples: $4 \times (-6) = (-24)$

2. The product of a Negative Integer and a Positive Integer is negative.

Examples: $(-4) \times 8 = (-32)$

3. The product of two Positive Integers is positive.

Examples: $5 \times 10 = 50$

4. The product of two Negative Integers is always positive.

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

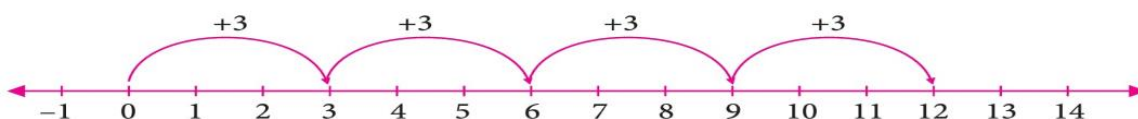
⇒ Let us understand with some examples:

Example: Find the value of $(+3) \times (+4)$

Solution: $= (+3) \times 4$

$$= (+3) + (+3) + (+3) + (+3) = (+12) \text{ or } 12$$

On the number line, $(+3) \times (+4)$ means moving to the right of zero 4 times in steps of 3.



Example: Find $(-3) \times (+4)$

Solution: $= (-3) \times 4$

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

$(-3) \times (+4)$ means moving to the left of zero 4 times in steps of 3.

