

Addition of Integers



Adding integers is the process of finding the sum of two or more integers.

Adding Integers on a Number Line

The addition of integers on a number line is based on the given principles:

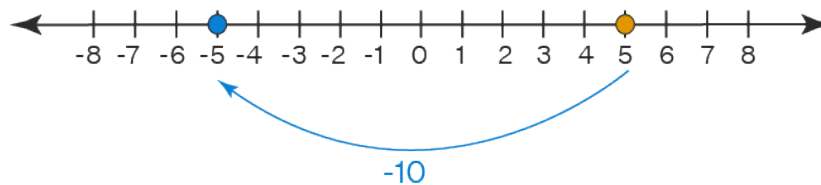
- Adding a positive number is done by moving towards the right side (or the positive side) of the number line.
- Adding a negative integer is done by moving towards the left side (or the negative side) of the number line.
- Any one of the given integers is taken as the base point from where we start moving on the number line.



Let us understand with an example:

Example: Use the number line and add the following integers: $5 + (-10)$

Solution: Since we need to add a negative number (-10) , we will move towards the left on the number line. Starting from 5, we will take 10 steps towards the left which will bring us to -5 .



$$5 + (-10) = -5$$

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Rules of addition of Integers

Rule 1: To add two integers of like signs, add their values regardless of their signs and give the sum their common sign.

For Example: (i) $28 + 35 = 63$ (ii) $(-15) + (-19) = -(15 + 19) = -34$



Rule 2: To add two integers of unlike signs, find the difference between their numerical values regardless of their signs and give the sign of the greater integer to this difference.

For Example: (i) $-35 + 12 = -23$ (ii) $68 + (-37) = 31$