

Number Line: Operations

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

Radhika Yadav

FOSSEE, IIT Bombay

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Learning Objectives



Learning Objectives

We will learn, how to



Learning Objectives

We will learn, how to

► Add integers on the number line



Learning Objectives

We will learn, how to

- ▶ **Add integers on the number line**
- ▶ **Subtract integers on the number line**



Learning Objectives

We will learn, how to

- ▶ **Add integers on the number line**
- ▶ **Subtract integers on the number line**
- ▶ **Calculate the additive inverse**



System Requirement



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► macOS Catalina version 10.15.7



System Requirement

- ▶ **macOS Catalina version 10.15.7**
- ▶ **Google Chrome version 101.0.49**



Prerequisites



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- ▶ Learners should be familiar with topics in basic mathematics



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- ▶ Please use the link below to access the tutorials on PhET Simulations
<https://spoken-tutorial.org>



Link for PhET Simulation



Link for PhET Simulation

- ▶ Please use the given link to download the PhET simulation
<https://phet.colorado.edu/en/simulations/number-line-operations>



PhET Simulation



PhET Simulation

In this tutorial we will use,



PhET Simulation

In this tutorial we will use,

► **Number Line: Operations** PhET simulation



Assets and Debts table

Sr. No.	Transactions
1	Add a cycle as an asset of \$300
2	Add a TV as an asset of \$200
3	Add debt of \$400 taken for monthly expenses
4	Add salary as an asset of \$100
5	Add debt of \$100 taken as education loan



Summary

We have learnt, how to

- ▶ **Add integers on the number line**
- ▶ **Subtract integers on the number line**
- ▶ **Calculate the additive inverse**



Assignment I

1. Use the Operations screen to calculate the net worth in different scenarios
2. Open the Generic screen and choose the two numerical expressions option



Assignment II

3. Then perform the steps shown in this table

Sr. No.	Person 1	Person 2
1	Set initial value to 1	Set initial value to -3
2	Add value equal to 2	Remove value equal to 1
3	Add value equal to 6	Add value equal to 9

4. Compare the different operations on integers



About the Spoken Tutorial Project

- ▶ Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
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Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Answers for THIS Spoken Tutorial

- ▶ Questions in THIS Spoken Tutorial?
- ▶ Visit <https://forums.spoken-tutorial.org>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ The Spoken Tutorial project will ensure an answer



You will have to register to ask questions



Acknowledgements

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funded by the Ministry of Education,
Govt. of India**



Thank you

- ▶ This is Radhika Yadav, a FOSSEE summer fellow 2022, IIT Bombay signing off
- ▶ Thanks for joining

