LESSON MAKER PRO

Number Line Moves

Add and subtract rational numbers.

GRADE 7 · MT.7.NS.1

MT.7.NS.1 "Add and subtract rational numbers, represent addition and subtraction on a horizontal or vertical number line diagram, and understand subtraction as adding the additive inverse p − q = p + (−q)."

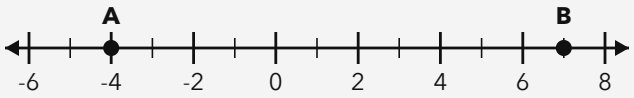
NAME _____ DATE _____

SUBTRACT BY ADDING

To subtract a rational number, add its opposite: p - q = p + (-q). On a number line, adding a positive number moves right, and adding a negative number moves left.

WORKED EXAMPLE

What number must you add to A to reach B? Write an addition equation.

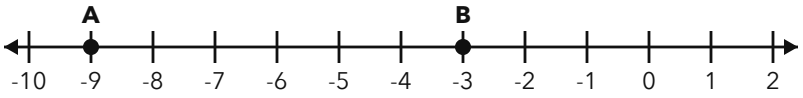


1. A is -4, and B is 7.
2. Find the move: 7 - (-4) = 7 + 4.
3. The move is 11.

Answer: -4 + 11 = 7

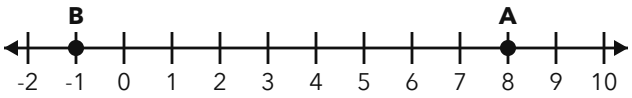
PRACTICE 6 problems

1 Write an addition equation that shows the move from A to B.



ANSWER _____

2 Write an addition equation that shows the move from A to B.



ANSWER _____

3 Find the difference: -3/4 - 1/2.

ANSWER _____

4 Find the difference: 6 - (-1/2).

ANSWER _____

5 Find the sum: -1.8 + 0.6.

ANSWER _____

6 Find the difference: 1/6 - 2/3.

ANSWER _____

APPLY IT Show your work

1 Mira's score in a game is -6.5 points. She earns 8.25 points, then loses 1.5 points. What is her new score?

WORK SPACE

ANSWER _____

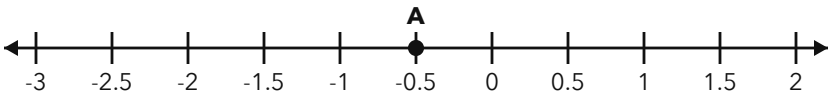
2 The temperature at a skate park is -1.5°C. It falls 2.25°C by evening. What is the evening temperature?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Start at A. Subtract 2, then add 3/2. Where do you land? Write one equation showing both moves.



WORK SPACE AND ANSWER

ANSWER KEY

Number Line Moves

GRADE 7 · MT.7.NS.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write an addition equation that shows the move from A to B.	**-9 + 6 = -3**
2	Write an addition equation that shows the move from A to B.	**8 + (-9) = -1**
3	Find the difference: -3/4 - 1/2.	**-5/4**
4	Find the difference: 6 - (-1/2).	**13/2**
5	Find the sum: -1.8 + 0.6.	**-1.2**
6	Find the difference: 1/6 - 2/3.	**-1/2**

PART 2 · APPLY IT

1. **0.25 points** -6.5 + 8.25 - 1.5 = 0.25.
2. **-3.75°C** -1.5 - 2.25 = -3.75.

CHALLENGE

-1/2 - 2 + 3/2 = -1

Accept equivalent fractions or decimals where appropriate. For number line equations, accept any correct addition equation that starts at A and ends at B.