LESSON MAKER PRO

Signed Moves

Track changes on a number line.

GRADE 7 · 7.NOS.A.1

7.NOS.A.1 "Add and subtract rational numbers using multiple strategies and representations. Describe situations in which opposite quantities combine to make 0. Model the addition of rational numbers as movement along a number line..."

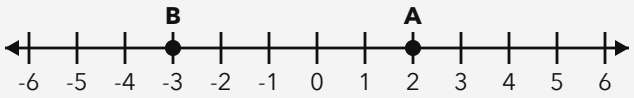
NAME _____ DATE _____

MOVE AND ADD

On a number line, a positive addend moves right and a negative addend moves left. To subtract, add the opposite: p - q = p + (-q). A number and its opposite add to 0.

WORKED EXAMPLE

Start at A and move to B. Write an addition equation for the move.



1. Start at 2.
2. Move 5 units left, so add -5.
3. 2 + (-5) = -3.

Answer: 2 + (-5) = -3

PRACTICE 4 problems

1 Find 7 + (-9).

ANSWER _____

2 Find 8 - (-4).

ANSWER _____

3 Find -6 + 11.

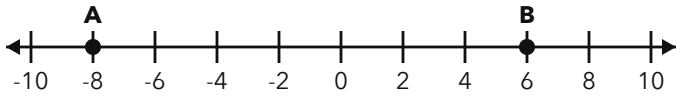
ANSWER _____

4 Find -3/4 - 1/2.

ANSWER _____

APPLY IT Show your work

1 At dawn, the temperature is at A. At noon, it is at B. What is the signed change in degrees Celsius?



ANSWER _____

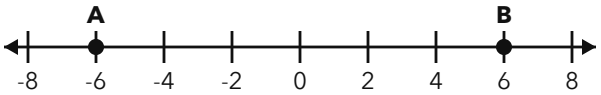
2 Your lunch account balance is -$12. You add $17, then buy a $9 lunch. What is your balance?

WORK SPACE

ANSWER _____

CHALLENGE One step up

In a game, start at A points. Gain 15 points, then lose x points to finish at B. Find x and write an equation.



WORK SPACE AND ANSWER

ANSWER KEY

Signed Moves

GRADE 7 · 7.NOS.A.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 7 + (-9).	**-2**
2	Find 8 - (-4).	**12**
3	Find -6 + 11.	**5**
4	Find -3/4 - 1/2.	**-5/4**

PART 2 · APPLY IT

1. **+14°C** Subtract the dawn temperature from the noon temperature: 6 - (-8) = 14.
2. **-$4** Add the deposit, then subtract the cost: -12 + 17 - 9 = -4.

CHALLENGE

x = 3; -6 + 15 - 3 = 6

Accept -1 1/4 for -5/4. For the challenge, accept any correct equation that shows the start, gain, loss, and finish.