LESSON MAKER PRO

Where Do You Land?

Add rational numbers and interpret where the sum lands.

GRADE 7 · 7A.NS.A.8.b

7A.NS.A.8.b "Interpret the sum of two or more rational numbers, by using a number line and in real-world contexts."

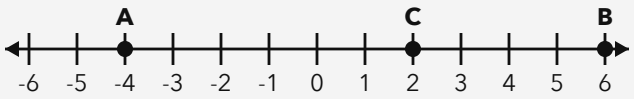
NAME _____ DATE _____

ADD ON A NUMBER LINE

Start at the first number on a number line. Move right for a positive addend or left for a negative addend. The point where you land is the sum.

WORKED EXAMPLE

On the number line, find A + B. Where do you land?

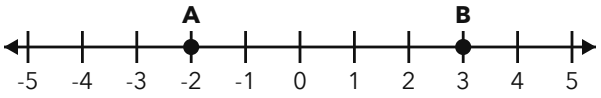


1. Start at A, which is -4.
2. B is 6, so move 6 units right.
3. Land at C, which is 2.

Answer: A + B = -4 + 6 = 2.

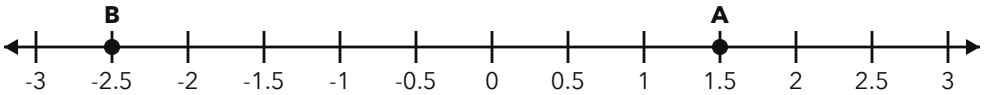
PRACTICE 6 problems

1 Use the number line to find A + B. What value do you land on?



ANSWER _____

2 Use the number line to find A + B. What value do you land on?



ANSWER _____

3 Use the number line to find A + B. What value do you land on?



ANSWER _____

4 Find 7/8 + (-3/8) + (-1/4). Is the sum positive or negative?

ANSWER _____

_____

5 Find -1.2 + 0.7 + 0.3. Is the sum positive or negative?

ANSWER _____

_____

6 Find -2/3 + 5/6. Is the sum to the left or right of 0 on a number line?

ANSWER _____

_____

APPLY IT Show your work

1 In an online game, your skill rating changes by -1.5 points, then 2.25 points, then -0.25 points. What is the total change in your rating? What does the sign tell you?

WORK SPACE

ANSWER _____

2 You owe a friend $4.75, so your balance with that friend is -$4.75. You repay $2.50, then borrow another $1.25. What is your new balance? What does it mean?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Two players each start at -1/2 on a number line. Player A adds 7/4, then -9/4. Player B adds -9/4, then 7/4. Where does each player land? Explain why.

WORK SPACE AND ANSWER

ANSWER KEY

Where Do You Land?

GRADE 7 · 7A.NS.A.8.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use the number line to find A + B. What value do you land on?	**1**
2	Use the number line to find A + B. What value do you land on?	**-1**
3	Use the number line to find A + B. What value do you land on?	**-3**
4	Find 7/8 + (-3/8) + (-1/4). Is the sum positive or negative?	**1/4; positive**
5	Find -1.2 + 0.7 + 0.3. Is the sum positive or negative?	**-0.2; negative**
6	Find -2/3 + 5/6. Is the sum to the left or right of 0 on a number line?	**1/6; right of 0**

PART 2 · APPLY IT

1. **0.5 points; the rating increased by 0.5 points.** Add -1.5 + 2.25 + (-0.25) = 0.5. A positive total means the rating increased.
2. **-$3.50; you owe your friend $3.50.** Add -4.75 + 2.50 + (-1.25) = -3.50. The negative balance means you still owe money.

CHALLENGE

Both land at -1. The two added numbers total -1/2 in either order, so each player's final position is -1/2 + (-1/2) = -1.

Accept equivalent fractions or decimals for the sums. For the challenge, accept explanations that show why changing the order of the addends does not change the final position.