LESSON MAKER PRO

Flip the Subtraction

Find the difference by adding the opposite.

GRADE 7 · 7.NS.A.4.c

7.NS.A.4.c "Explain subtraction of rational numbers as addition of additive inverses."

NAME _____ DATE _____

ADD THE OPPOSITE

To subtract a rational number, add its additive inverse, or opposite. A number and its opposite add to 0, so subtracting a negative number is the same as adding a positive number.

WORKED EXAMPLE

Find -2/5 - 3/10.

1. Rewrite the subtraction: -2/5 + (-3/10).
2. Use a common denominator: -4/10 + (-3/10).
3. Add: -7/10.

Answer: -7/10

PRACTICE 6 problems

1 Rewrite 8 - 13 as addition, then find the value.

ANSWER _____

2 Rewrite -6 - (-11) as addition, then find the value.

ANSWER _____

3 Rewrite 3/4 - 1/8 as addition, then find the value.

ANSWER _____

4 Rewrite -7/9 - 2/3 as addition, then find the value.

ANSWER _____

5 Rewrite 1.2 - (-0.45) as addition, then find the value.

ANSWER _____

6 Rewrite -0.6 - 1.75 as addition, then find the value.

ANSWER _____

APPLY IT Show your work

1 In a game, Kai's score changes from -3.5 points to 2.25 points. How many points did the score increase? Rewrite the subtraction as addition of the opposite.

WORK SPACE

ANSWER _____

2 Mina has $12.50 in a game account that allows a negative balance. She buys an item for $18.75. What is her new balance? Rewrite the subtraction as addition of the opposite.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A student writes -3/4 - (-1/2) = -3/4 + (-1/2) = -5/4. Explain the error, rewrite the subtraction correctly, and find its value.

WORK SPACE AND ANSWER

ANSWER KEY

Flip the Subtraction

GRADE 7 · 7.NS.A.4.c

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Rewrite 8 - 13 as addition, then find the value.	**8 + (-13) = -5**
2	Rewrite -6 - (-11) as addition, then find the value.	**-6 + 11 = 5**
3	Rewrite 3/4 - 1/8 as addition, then find the value.	**3/4 + (-1/8) = 5/8**
4	Rewrite -7/9 - 2/3 as addition, then find the value.	**-7/9 + (-2/3) = -13/9**
5	Rewrite 1.2 - (-0.45) as addition, then find the value.	**1.2 + 0.45 = 1.65**
6	Rewrite -0.6 - 1.75 as addition, then find the value.	**-0.6 + (-1.75) = -2.35**

PART 2 · APPLY IT

1. **2.25 + 3.5 = 5.75 points** Find the change by subtracting the starting score from the ending score: 2.25 - (-3.5) = 2.25 + 3.5 = 5.75.
2. **12.50 + (-18.75) = -$6.25** Subtract the cost from the starting balance by adding its opposite: 12.50 + (-18.75) = -6.25.

CHALLENGE

The opposite of -1/2 is 1/2, not -1/2. The correct calculation is -3/4 + 1/2 = -1/4.

Accept equivalent fractions and decimal forms. For each rewrite, check that the second number changes to its additive inverse.