LESSON MAKER PRO

Integer Sign Quest

Use signs to compute with positive and negative numbers.

GRADE 6 · 6.CE.2.b

6.CE.2.b "Add, subtract, multiply, and divide two integers.*"

NAME _____ DATE _____

TRACK THE SIGNS

When you add integers with different signs, find the difference between their absolute values and keep the sign of the number with the greater absolute value. To subtract an integer, add its opposite. When you multiply or divide integers, matching signs give a positive answer and different signs give a negative answer.

WORKED EXAMPLE

-13 + 8

1. Find the difference: 13 - 8 = 5.
2. -13 has the greater absolute value.
3. Keep that sign: -5.

Answer: -5

PRACTICE 6 problems

1 -17 + (-6) =

ANSWER _____

2 24 + (-9) =

ANSWER _____

3 -15 - 7 =

ANSWER _____

4 11 - (-12) =

ANSWER _____

5 -7 * 9 =

ANSWER _____

6 -54 / (-6) =

ANSWER _____

APPLY IT Show your work

1 In a game, Maya loses 16 points in one round and earns 25 points in the next round. What is her total change in score?

WORK SPACE

ANSWER _____

2 Six members of an online club split a debt of $42 evenly. Write each member's change in balance as an integer.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Which expression has the greater value: -32 - 14 or -32 + (-14)? Explain your reasoning.

WORK SPACE AND ANSWER

ANSWER KEY

Integer Sign Quest

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	-17 + (-6) =	**-23**
2	24 + (-9) =	**15**
3	-15 - 7 =	**-22**
4	11 - (-12) =	**23**
5	-7 * 9 =	**-63**
6	-54 / (-6) =	**9**

PART 2 · APPLY IT

1. **9 points** Add the two score changes: -16 + 25 = 9.
2. **-7 dollars** Represent the debt as -42, then divide: -42 / 6 = -7.

CHALLENGE

They are equal. Both expressions equal -46 because subtracting 14 is the same as adding -14.

Accept correct use of a plus sign for positive answers. For the word problems, accept 9 or +9 points and -7 dollars if the signed value is clear.