LESSON MAKER PRO

Expression Remix

Use operation properties to rewrite expressions.

GRADE 6 · MA.6.AR.1.4

MA.6.AR.1.4 "Apply the properties of operations to generate equivalent algebraic expressions with integer coefficients."

NAME _____ DATE _____

BREAK APART, THEN COMBINE

Use the distributive property to multiply a number by every term inside parentheses. Then use the commutative and associative properties to group and combine like terms.

WORKED EXAMPLE

Simplify: 7(x + 4) - 9

1. Distribute 7: 7x + 28 - 9
2. Combine constants: 7x + 19

Answer: 7x + 19

PRACTICE 6 problems

1 Simplify: 3(x + 5) + 2x

ANSWER _____

2 Simplify: 8x - 3(x - 2)

ANSWER _____

3 Simplify: -2(x + 6) + 5x

ANSWER _____

4 Simplify: 6(2x - 3) - x

ANSWER _____

5 Simplify: 5x + 8 - 2x + 3

ANSWER _____

6 Simplify: -3(2x - 5) + 8x

ANSWER _____

APPLY IT Show your work

1 At an arcade, Jalen plays 5 rounds. In each round, he earns x tickets plus 3 bonus tickets. He spends 2x tickets on game upgrades. Write and simplify an expression for the number of tickets he has left.

WORK SPACE

ANSWER _____

2 At a school spirit sale, a team packs 3 boxes. Each box contains x wristbands and 6 stickers. The team also packs 5x extra wristbands for a later event. Write and simplify an expression for the total number of items packed.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Simplify: $5(2x - 3) - 2(x + 8) + 3x$

WORK SPACE AND ANSWER

ANSWER KEY

Expression Remix

GRADE 6 · MA.6.AR.1.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Simplify: 3(x + 5) + 2x	**5x + 15**
2	Simplify: 8x - 3(x - 2)	**5x + 6**
3	Simplify: -2(x + 6) + 5x	**3x - 12**
4	Simplify: 6(2x - 3) - x	**11x - 18**
5	Simplify: 5x + 8 - 2x + 3	**3x + 11**
6	Simplify: -3(2x - 5) + 8x	**2x + 15**

PART 2 · APPLY IT

1. **3x + 15** Write 5(x + 3) - 2x. Distribute and combine like terms to get 3x + 15.
2. **8x + 18** Write 3(x + 6) + 5x. Distribute and combine like terms to get 8x + 18.

CHALLENGE

11x - 31

Accept equivalent expressions with terms in a different order. For the word problems, accept the simplified expression with or without a unit label.