

Expression Remix

Break apart, combine, and rewrite expressions.

GRADE 7 • 7.EE.A

CCSS.Math.Content.7.EE.A "Use properties of operations to generate equivalent expressions."

NAME _____

DATE _____

BUILD EQUIVALENT EXPRESSIONS

Use the distributive property to multiply a number by every term inside parentheses. Then combine like terms, which have the same variable part. Keep each term's sign when you combine.

WORKED EXAMPLE

Simplify: $8(4x + 3) + x$

1. Distribute 8: $32x + 24 + x$

2. Combine like terms: $33x + 24$

Answer: $33x + 24$

PRACTICE 6 problems

1 Simplify: $11x + 14 - 5x$

ANSWER _____

2 Simplify: $10(y + 9) - 5y$

ANSWER _____

3 Simplify: $11(a - 2) + 6a$

ANSWER _____

4 Simplify: $16 - 9(n + 2)$

ANSWER _____

5 Simplify: $14p - 6 + 9p + 12$

ANSWER _____

6 Simplify: $16 - 9(5m - 2)$

ANSWER _____

APPLY IT Show your work

- 1** Ava is putting together 7 prize bags for a school game night. Each bag has p stickers and 6 buttons. Write and simplify an expression for the total number of items in all the bags.

WORK SPACE

ANSWER _____

- 2** Rina buys 5 identical game add-on bundles. Each bundle includes g collectible cards and 7 digital tokens. Write and simplify an expression for the total number of cards and tokens.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Simplify: $12(2x - 5) - 7(x + 6) + 9$

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Simplify: $11x + 14 - 5x$	$6x + 14$
2	Simplify: $10(y + 9) - 5y$	$5y + 90$
3	Simplify: $11(a - 2) + 6a$	$17a - 22$
4	Simplify: $16 - 9(n + 2)$	$-9n - 2$
5	Simplify: $14p - 6 + 9p + 12$	$23p + 6$
6	Simplify: $16 - 9(5m - 2)$	$34 - 45m$

PART 2 • APPLY IT

1. **$7p + 42$** Write $7(p + 6)$ because there are 7 identical bags. Distribute 7 to get $7p + 42$.
2. **$5g + 35$** Write $5(g + 7)$ for the 5 identical bundles. Distribute 5 to get $5g + 35$.

CHALLENGE

 $17x - 93$

Accept terms written in a different order, such as $14 + 6x$. Students may show distribution and combining steps in a different valid order.