

## Lesson 6-6 • Group 1

# Reinforce Understanding

## 6.6 Small Group • Group 1

With my small group, I can show that two expressions are equivalent by simplifying and combining like terms — one step at a time, with support.

**Worked model**

Are  $7c + 9 + 6c$  and  $13c + 9$  equivalent? Simplify to decide.

1. Find the like terms.  $7c$  and  $6c$  both have the letter  $c$ .
2. Combine the like terms.  $7c + 6c = 13c$
3. Keep the constant. The 9 has no letter, so it stays alone.
4. Compare.  $13c + 9$  matches the second expression.

**Answer: Yes. Both expressions simplify to  $13c + 9$ , so they are equivalent.**

**Practice**

Complete each exercise. Show the reasoning that supports your answer.

**1. Which expression is equivalent to  $4x + 3x$ ?**

Circle the letter of the best answer. Show how you know.

- A.  $7x$
- B.  $7x^2$
- C.  $12x$
- D.  $43x$

Show your work

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**2. Which expression is equivalent to  $2(m + 5)$ ?**

Circle the letter of the best answer. Show how you know.

- A.  $2m + 10$
- B.  $2m + 5$
- C.  $7m$
- D.  $m + 10$

Show your work

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**3. Sort each pair of expressions by whether they are equivalent or not.**

Write the name of the correct group on each line.

Groups: Equivalent Not Equivalent

- \_\_\_\_\_  $3x + 2x$  and  $5x$
- \_\_\_\_\_  $2(n + 4)$  and  $2n + 8$
- \_\_\_\_\_  $4a + 3$  and  $7a$
- \_\_\_\_\_  $x + x$  and  $2x$
- \_\_\_\_\_  $3y + 2$  and  $5y$