

Lesson 8-3 • Group 2

Reinforce Understanding

8.3 Small Group • Group 2

I can solve one-step multiplication and division equations using inverse operations, explain why the method works, and use it on a problem I have not seen before.

Worked model

A stamp album has 7 pages that each hold p stamps. It holds 91 stamps in all. Solve $7p = 91$.

1. The variable p is multiplied by 7, so the inverse operation is division.
2. Divide BOTH sides by 7 so the equation stays balanced.
3. Left side: $7p \div 7$ leaves p . Right side: $91 \div 7$ gives 13.
4. Check: 7×13 makes 91, so both sides are equal.

Answer: $p = 13$, so each page holds 13 stamps.

Practice

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

1. Solve each equation, show your work, and check.

Complete the table. Show how you found each value.

Equation	Work	Solution	Check
$8m = 56$			
$y / 6 = 11$			
$12k = 96$			

Show your work

2. Solve $5x = 40$ using the balance scale.

Decide whether each pair balances. Check Yes or No, then explain.

	Left side		Right side	Balanced?

Explain your choice

3. Vault A is sealed with $4x = 32$. Crack the lock: what is x ?

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

- A. $x = 8$
- B. $x = 28$
- C. $x = 36$
- D. $x = 128$

Show your work
