

Lesson 8-7 • Group 2

Reinforce Understanding**8.7 Small Group • Group 2**

I can model and solve real-world problems using equations and inequalities, explain what each part stands for, and build one for a situation I have not seen before.

Worked model

Clue: 'A total divided equally among 4 people gave each \$85.'

1. This has an exact total, so I use an equation. Let t be the total.
2. Divided among 4 to get 85 means $t \div 4 = 85$, so $t = 85 \times 4 = 340$.
3. Check reasonableness: \$340 split 4 ways is \$85 each. That makes sense!

Practice

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

1. Write a model, solve, and check reasonableness for each problem.

Complete the table. Show how you found each value.

Word Problem	Model	Solution	Reasonable?
Five identical boxes weigh a total of 60 pounds. How much does each box weigh?			
A shelf can hold at most 30 books. There are already 17 books. How many more can be added?			
A baker split 84 cookies equally into bags of 12. How many bags did she use?			

Show your work

2. Solve this two-step problem: $3x + 5 = 26$

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

	Left side		Right side	Balanced?

Explain your choice
