Problem Solving: Strategy
Write an Equation

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A baker buys 20 pounds of butter. At the end of the week, there are only $1\frac{1}{4}$ pounds left. How much did she use?

Step 1	**Be sure you understand the problem.**
Read ➤	Read carefully.
	What do you know?
	• A baker buys _____.
	• There are _____ left.
	What do you need to find?
	• How much _____.

Step 2	**Make a plan.**
Plan ➤	Choose a strategy.
• Logical Reasoning	You can write an equation to make it easier to solve the problem.
• Draw a Picture or Diagram	Then you can use the guess-and-check strategy to find the number that makes the equation true.
• Make a Graph	
• Do an Experiment	
• Make a Table or List	
• Find a Pattern	
• Guess and Check	
• Write an Equation	
• Work Backward	
• Solve a Simpler Problem	

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Step 3

Solve ▶

Carry out your plan.
Write an equation to show the problem.
Think:
   amount of butter left + amount of butter used = total amount

Equation:
   _____ + ☐ = _____

Use the guess-and-check strategy to find the number that makes the equation true.

Guess: _____

Check: _____

Guess: _____

Check: _____

Guess: _____

Check: _____

How many pounds of butter did the baker use? _____

Step 4

Look Back ▶

Is the solution reasonable?
Reread the problem.
Have you answered the question? _____
Is your answer reasonable?

_____

Practice Write an equation, then solve.

1. A deli has $2\frac{1}{4}$ pounds of tuna salad left at the end of the day. How many pounds of tuna salad did it sell if it started with 12 pounds?

2. A contractor buys 30 pounds of cement. At the end of the week there are only $6\frac{1}{2}$ pounds of cement left. How much cement did he use?

Problem Solving: Strategy
Write an Equation

Write an equation, then solve.

1. At the end of the day, a baker has $3\frac{1}{2}$ pounds of rye flour left. How many pounds of rye flour does he use if he starts with 15 pounds?

2. A chef buys 50 pounds of rice. At the end of the week, she has $12\frac{3}{4}$ pounds of rice left. How much does she use?

3. Social Studies Daniel Boone was born in 1734. In 1789, George Washington was elected the first president of the United States. How old was Daniel Boone when Washington was elected President?

4. Measurement A carpenter has a piece of wood 12 feet long. After he cuts the wood into pieces, $3\frac{5}{8}$ feet are left. How much of the wood does the carpenter use?

Mixed Strategy Review

Solve. Use any strategy.

5. Five students are lined up in the cafeteria. Beth is first in line. Jeff is 2 places behind Ernesto. Leah is ahead of Peter, who is fifth in line. Who is third in line?

Strategy: _____

6. Time Amanda leaves her house at 4:12 P.M. She meets Kyle 6 minutes later and together they walk to the library. If they arrive at the library at 4:35 P.M., how long do Kyle and Amanda walk together?

Strategy: _____

7. Daniel makes candles. The supplies needed to make a dozen candles cost $5.25. How much profit does he make if he sells all the candles for $4.50 each?

Strategy: _____

8. Write a problem for which you could write an equation to solve. Share it with others.

_____

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