

SECTION

1B

Ready to Go On? Skills Intervention**1-8 Solving Equations by Subtracting**

Subtraction is the inverse, or opposite, operation of addition.
If an equation contains addition, you can solve the equation by subtracting from both sides to “undo” the addition.

Solving Equations by Subtracting

Solve the equation. Check your answer.

A. $y + 46 = 78$

$$y + 46 = 78$$

$$y = \underline{\hspace{2cm}}$$

Check: $y + 46 = 78$

$$\underline{\hspace{2cm}} + 46 \stackrel{?}{=} 78$$

$$78 \stackrel{?}{=} 78$$

What number is added to y ? _____

What operation will you perform to “undo” the addition? _____

Subtract.

What number will you substitute into the equation for y ?

Are the two numbers equal? _____
_____ is the solution.

B. Ellen and Laura knitted 48 caps. If Ellen knitted 12 of the caps, how many caps did Laura knit?

Let c stand for the number of caps Laura knitted.

You can use the equation $c + 12 = 48$.

$$c + 12 = 48$$

$$c = 36$$

Check: $c + 12 = 48$

$$\underline{\hspace{2cm}} + 12 \stackrel{?}{=} 48$$

$$48 \stackrel{?}{=} 48$$

What number is added to c ? _____.

What number will you subtract from both sides to “undo” the addition? _____

Subtract.

What number will you substitute into the equation for c ?

Are the two numbers equal? _____
_____ is the solution.

Laura knitted _____ caps.

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Ready to Go On? Problem Solving Intervention**1-8 Solving Equations by Subtracting**

You can use equations to find missing data.

How many points did the Cougars score in the second quarter?

	1	2	3	4	Final
Cougars	17		0	9	45
Tigers	10	3	21	3	37

Understand the Problem

1. What missing number do you need to find?

Make a Plan

2. How are the numbers in the row for the Cougars related?

Solve

3. Write an equation to show the relationship among the scores for the Cougars.

4. Use the equation to solve the problem.

Check

5. Substitute to check your solution.

Write and solve an equation to solve each problem.

6. A bill for 3 books came to \$47. One book cost \$19 and another cost \$15. What did the third book cost?

7. You bowled 3 games and got a total score of 358. Your scores for the last two games were 108 and 137. What was your score for the first game?
