

**3****Solving Equations****Exercise 17***Lessons 3.5 to 3.11*

Solve each equation. Show all your steps. Check.

1.  $12x - 18 = 126$

2.  $-8(5 + k) = -104$

3.  $36 + 3m = 12m$

4.  $180 = \frac{v}{2} + 4$

5.  $\frac{x}{-5} + 6 = -4$

6.  $12(r - 6) = 48$

**CRITICAL THINKING**

Solve each problem. Show your work.

1. The football team scored 24 points in the first half. The team's final score was 45 points. How many points did the football team score in the second half?
2. Lonna has \$278.00 in her savings account. Debbie has 3 times as much as Lonna. How much money does Debbie have in her savings account?
3. Harry earned \$171.00 last week. He worked 30 hours. What is his hourly pay rate?

**3****Solving Equations****Exercise 16**

Lessons 3.1, 3.2, 3.4, 3.7, and 3.9 to 3.11

A. Write *true* or *false* after each sentence. If the sentence is *false*, change the underlined word or words to make it true.

1. Equivalent equations are equations that have the same variable.

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2. The solution to an equation is any value of the variable that makes the equation true.

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3. Inverse operations are operations that “undo” each other. For example, addition and subtraction are inverse operations.

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4. Discount is the amount you spend when you buy an item on sale.

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B. Solve each equation. Then, check the solution.

1.  $5(12 + k) = 215$

2.  $\frac{y}{7} = -7$

3.  $36 = -9(w + 1)$

4.  $42 + 12d = 5d$