# **Assignment: Solving Linear Equations**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

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# **Solve and check the answer.**

1. $5x+8=88$ 5. $-5\left(y+3\right)=5$

2. $4+3x-6=3x+2-x$ 6. $19-(2x+3)=2\left(x+3\right)+x$

3. $\frac{4}{7}x+2=-6$ 7. $\frac{1}{2}\left(2x+6\right)=\frac{1}{5}(10x+20)$

4. $5\left(x-1\right)=2(x+5)$

**Define the variables. Write and solve an equation for each of the following.**

8.Sue’s couch is 200 centimeters long. It is 16 centimeters less than 3 times the length of the matching chair. How long is the matching chair?

9. You have two summer jobs. In the first job, you work 25 hours per week and earn $7.75 per hour. In the second job, you earn $6.25 per hour and can work as many hours as you want. You want to earn $250 per week. How many hours must you work at the second job?

10. A toy company manufactures a certain toy at a cost of $300 per day plus $25 per toy. The company sells the toy for $35. How many toys must the company sell in one day in order to break even? Show Work!

A. 10 B. 5 C. 3 D. 30