

Name: _____ Date: _____ / _____ Points

Algebra 1
Chapter 2 Sections 1-5 Study Guide
Solving Equations

Directions: Solve each equation. Answers should be a reduced, improper fraction. Circle or Box your answer!

<p>1. $44 = -4b + 68$</p> <p>ANSWER: _____</p>	<p>2. $\frac{2}{5}(c - 1) = 6$</p> <p>ANSWER: _____</p>
<p>3. $10 - 4b = 27$</p> <p>ANSWER: _____</p>	<p>4. $4 = \frac{1}{3}n - 9$</p> <p>ANSWER: _____</p>

5. $\frac{n-2}{7} = -2$

ANSWER: _____

6. $2t - 4 = 12(t - 1)$

ANSWER: _____

7. $\frac{1}{2}(2x - 5) + 8 = 35$

ANSWER: _____

8. $-5(c + 4) - (-c - 5) = 15$

ANSWER: _____

Directions: Define a variable and write an equation to model each situation. Then solve.

9. The total cost for 8 bracelets, including shipping was \$54. The shipping charge was \$6. What was the cost of each bracelet?
10. Music Download Store A charges a monthly fee of \$10 plus \$1 per song downloaded. Music Download Store B charges a monthly fee of \$30 for all the songs you want to download.
- a. How many songs would you have to download from the first store for the cost to be the same for the month as the second store?
- b. If you only download 15 songs per month, from which download store would you buy your music?

Solve each equation. Please circle your answer and SHOW ALL WORK! ☺

1. $\frac{5}{3}p = \frac{8}{3}$	2. $\frac{3}{5}(n-3) = -4$	3. $\frac{1}{3}p - \frac{3}{4} = \frac{3}{8}$
4. $6x - 3x - 8 = 13$	5. $4y - 5 = 3y + 12$	6. $3(5x-8) - 8 = 4+2x$
7. $21a - 22 = -7(2-3a)$	8. $-(2+8x) - 3(-9-2x) = 49$	9. $-1+7n = -7(-4+6n)+30$

10. Write your own equation that:

- 1.) that has variables on both sides
- 2.) gives an answer of $x=3$. (You may want to work backwards!)
THEN Check your work by solving the equation.

For #11:

1.) Define your variable 2.) Set up an equation 3.) Solve 4.) Answer the question 5.) Check!

11. You have a part time job. You work 2 hours on Thursday and 7 hours on Saturday. You also receive a \$20 allowance. You earn \$92 each week. **What is your hourly wage at your job?**