

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

### Algebra Equations Quiz Review

Solve each of the following equations.

If the answer is not an integer, leave the answer as a reduced improper fraction.

1.  $-8x = 40$

2.  $5x - 15 = -45$

3.  $-\frac{2}{5}x + 4 = -12$

4.  $-12 = 9x + 12 - 12x$

5.  $-4(5x + 10) = -60$

6.  $6x - 6 = 351 - x$

7.  $12x - 4 - 9x = 3(x + 1) - 7$

8.  $2(2x + 3) = 4(x - 8)$

9.  $-6(2 - 6x) = 10x + 20x$

10.  $\frac{3}{4}(8x + 24) = 2(-x - 3)$

11. Give an example of each property:

a. Transitive Property: \_\_\_\_\_

b. Identity of Addition: \_\_\_\_\_

c. Inverse of Multiplication: \_\_\_\_\_

12. Identify the property used in each step below:

$$16 = -4x - 8$$

$$+8 \quad +8 \quad \underline{\hspace{2cm}}$$

$$24 = -4x + 0 \quad \underline{\hspace{2cm}}$$

$$24 = -4x \quad \underline{\hspace{2cm}}$$

$$\div -4 \quad \div -4 \quad \underline{\hspace{2cm}}$$

$$-6 = 1x \quad \underline{\hspace{2cm}}$$

$$-6 = x \quad \underline{\hspace{2cm}}$$

$$x = -6 \quad \underline{\hspace{2cm}}$$

13. John pays \$62 a month for his cell phone and pays \$3.25 for every GB of data that he uses over his allotted amount. If his bill was \$88, how many extra GB's did he use this month?

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_