Algebra Review #10 ***SHOW HOW YOU SOLVED EACH PROBLEM***

NAME _____

1. Fill in the properties that justify each step:

$4(2a - 1) = -10(a - 5)$	
$8a - 4 = -10a + 50$	
$18a - 4 = 50$	
$18a = 54$	
$a = 3$	

2. Solve using the order of operations. Write answer in box provided.

$$2\sqrt{196} - (-4)^2 \div -2 + \sqrt[3]{343}$$

3. Tell whether each of the following has one, none, or infinite solutions:

$-2(v - 2) = -3 - 2v$	$-3(v + 4) = 2v - 37$
$-4(v + 3) = -12 - 4v$	

4. Solve q^3 when $q = \frac{2}{5}$

5. Solve the equation IN TWO DIFFERNENT WAYS (Hint: Use the distributive property on one, and divide first on the other):

$12 = -4(-6x - 3)$	$12 = -4(-6x - 3)$
For this problem, which way do you feel was the best way to solve? Why?	

6.
Translate the following into either algebraic expressions or verbal expressions:

Each day (d) costs $140 plus a $25 fee	Half of the number of people (p) minus four
50 times the square root of the number (x)	The cube root of the difference between (x) and (y)

7. What is the value of the following:

$$4\sqrt{75} + -16\sqrt{12}$$

8. Simplify the radical.

$$\sqrt[3]{343c^7d}$$

9. Solve for variable y

$$8y + 16x = z$$

10. Solve for variable g

$$\frac{g+7}{h} = 3f$$