

Holiday Extra Credit #1  
Describe a Multi-Step Equation Solution  
Using our Lyrics!

**DUE:** 0755hrs, 05 January 2016

*Any submission time-stamped after the due date I will not grade.*

**Task:** Describe each step of the correct solution to a multi-step linear equation using our lyrics!

**Grading:** All or nothing! No partial credit! It must be correct completely to earn the points.

**Background:**

When we solve a multi-step linear equation such as:  $3 - 2(x + 1) = 4x - 2(5 - x)$  we do the following:

- a. multiply (Distributive property)
- b. Combine like terms
- c. Eliminate variable terms from one side
- d. Isolate the unknown term (Addition Property of Equality)
- e. solve for the unknown (Multiplication Property of Equality)

You are going to use your lyrics to describe each step, for example:

$$\frac{3}{4}x - 5 = 13$$

*"to what you want some stuff you add, both sides add its opposite."*

$$\frac{3}{4}x - 5 + 5 = 13 + 5$$

*"oops, don't cry, simplify!"*

*Equality properties never quit!"*

$$\frac{3}{4}x = 18$$

*"If what you want's been multiplied, flip that factor and times both sides."*

$$\frac{4}{3} \cdot \frac{3}{4}x = 18 \cdot \frac{4}{3}$$

*"oops, don't cry, simplify!"*

$$x = 24$$

*"What you want's now all alone, and what it is, now you know!"*

Here's your equation to describe and solve; show your work like the above example. Your solution should have **no less than 7 but no more than 10 steps!**

$$2x - 3(x - 5) + 7x = 8 + 6(4 - x) + 2$$

**BONUS:** Check your solution and describe using our lyrics!

Not good **luck**, but good **SKILLS!**