Dear Friend,

I am here to help you with multi-step equations. To do this, you will need to use the distributive property, combining like terms, and with variables on both sides.

For example, the equation *2(x-3) = 4(y+4) + x*. First, use the distributive property for *2(x-3)* and *4(y+4)*. To do this, you must multiply the number outside the parentheses by the numbers inside the parenthesis. *2(x-3)* will become *2x-6* because *2* will be multiplied by *x* and *-3*. Once you use your distributive property, the equation should look like *2x-6 = 4y+16 + x*.

Next, you have to combine like terms. Combining like terms is when you combine the multiples of the same variables. We will have to remove the *+ x* from the end. To do this, add *-x* to both sides of the equation. This will isolate *4y+16*, and turn the other side of the equation to *2x-6-x = 4y+16.* Now we have to combine *-x* and *2x*. 2-1=1, so *2x-x* will equal *1x*. The equation should now look like (*x-6=4y+16).*

Now, you must isolate the variables. First, you would add 6 to both constants to isolate *x*. You must do the inverse operation because it will cause a zero-pair with *-6*. "*x-6=4y+16"* will become "*x=4y+22*". This is our final answer.

In conclusion, you must always use the distributive property, or to multiply the number on the outside of the parenthesis by the numbers on the inside. You must also combine like terms to furthermore simplify the equation.

Sincerely,

Alex I.