Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per.\_\_\_\_\_\_\_

### U13 CW #2 *Solving Literal Equations and Formulas*

### Directions: solve the following showing ALL steps.

### Think-Pair-Share: What do you think the word literal means?

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### When do we use the word literal in math?

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### Let’s try:

### What is the value of x in the following equation? Show your thinking.

###  What might make this a challenge to solve?

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###  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### Show your work for the next problems here. Solve for x.

### **Remember:** Since there are multiple variables, it is impossible to get a numerical response because we have so many unknown values that are being represented with letters all within the same problem. The best we can do is to literally solve the equation, meaning manipulate the terms until we get a specific variable by itself.

### You try: Solve for the given variable. Show ALL you steps.

###  Solve for r: Solve for d: Solve for c: Solve for x:

### A formula is a literal equation that shows a rule for a relationship between quantities. What are some formulas you know?

### The formula for Area of a Rectanlge is ,where A is area, l is length, and w is width. If we know any two of the variables we can solve for the third.

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### What if you are given the Area and the width, could you find the length?

### What if we first rearrange the equation to literally solve for length and then solved for the actual length by using the given values?

### Let’s try it both ways: Find the length of a rectangle whose Area is 20.64in2 and width is 2.4in.