Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 7  
Chapter 4 – Expressions & Equations Notes #17  
**Problem Solving and Multi-Step Equations**

Solve.

1. Create a “LET” statement
   1. Assign a value to each variable term/expression.
2. Write an equation
   1. Solve your equation showing all work.
3. Plug-in to find each value in your “LET” statement
4. List solutions
5. Sally is 4 years older than Tim. Together, the sum of their ages is 20. How old is each?
6. The two angles below are supplementary, meaning their sum is   
   180°. Find the value of x, then list the measure of each angle.

**Problem 1:**

Jim is 2 years older than 3 times his little brother, Bobby. Together, their ages add up to 18. How old is each?

**Problem 2:**

A table costs $20 less than twice a chair. Together, the table and chair cost $400. Find the cost of each.

**Problem 3:**

The two angles below are complementary. This means that the sum of their measures is 90°. Write an equation to find the value of x. Then list the measure of each angle.

**Problem 4:**

Dave has six times as much money as Fred, and Bill has three times as much money as Fred. Together they have $550.00. How much does each have?

Hint\* Who do you know the LEAST about? That’s your variable!

**Problem 5:**

Andy’s weight is 5 pounds less than twice his brother’s weight. Together they weigh 100 pounds. What are their weights?