8-13 Sticky Subs

You and your partner will be given two equations and will use the substitution method to solve. For each problem do the following:

- Circle one side of the equation, the side that is ready to be substituted.
- Copy that circled part on one of your sticky labels.
- **Paste** the label over correct variable **in** the **other equation**.
- After pasting, solve to find both answers to the problem.
- 1) George drank a can of tomato juice and then finished off 3 bottles of root beer, a total of 60 fluid ounces. It takes two bottles of root beer to fill the tomato juice can.

 $T + 3 \cdot R = 60$ $2 \cdot R = T$

So a bottle of root beer contains _____fl. oz. and a can of juice contains _____fl. oz.

Do your answers check in the **original story**?

- 2) A cell phone and the activation fee cost \$200. The phone cost \$80 more than the activation fee.
 - C + M = 200 C = 80 + M

So the phone cost _____, while the activation fee is _____.

Do your answers check in the **original story**?

3) Connie loves bikes and owns both a racing bike and a Mountain bike. While the Mountain Bike is 8 pounds heavier than her racing bike, they weigh a total of only 60 pounds.

M = 8 + R M + R = 60

Connie's mountain bike weighs _____lbs and her racing bike weighs only ____lbs.

I assume you checked in the **story**, right?

- 4) Two burgers and an order of French fries cost \$9.25 at the Greasy Spoon Café. The fries are \$.50 less than a burger.
 - $2 \cdot B + F = 9.25$ F = B 0.50

So a burger costs ______ and the fries cost ______ Check? _____

5) Eric bought 4 CD's and two DVDs of Rambo XXI and XXII on Amazing.com for \$74. Each DVD was \$4 more than each CD.

 $4 \cdot C + 2 \cdot D = 74 \quad D = C + 4$ (Remember to distribute.)

So each CD costs _____, and each DVD costs _____. Check? _____

6) Mary and Dave believe one way to be eco-friendly is to plant pine trees. Mary has been doing this for years and has planted triple the number of pines that Dave has. Dave also knows that he has planted 1,500 less trees than Mary.

 $M = 3 \cdot D$ D = M - 1,500