Solving equations and word problems

Date: \_\_\_\_\_ Pd: \_\_\_\_

Solve each equation, show all steps, and circle your final answer.

1. 
$$\frac{3}{4}t - \frac{5}{6} = \frac{2}{3}t$$

2. 
$$3(3y-1)=-3+6y$$

3. 
$$4-3(4m-5)=\frac{1}{2}(24m-10)$$

4. Gary makes toy tables and chairs as a hobby. The cost of the materials to make a table and two chairs is \$45.50. He sells this set for \$120. Gary wants to buy a new table saw that costs \$1200. How many sets of tables and chairs must he sell to make enough money to buy the new table saw? (Do the 5 things!)

5. A gas station offers a discount card that costs \$75 a year, but gives you a \$0.25 discount per gallon of gas purchased. How many gallons of gas do you need to purchase to justify buying the discount card? (Do the 5 things!)