Name: _____   Period: _____   Date: _____

Math Journal: A Recreational Budget

You and nine friends have decided to take a few days to go camping in Pennsylvania's Allegheny National Forest. You are planning a recreational budget of $50 per day for activities. On one of the days you will rent canoes and tubes to explore the Clarion River. Tube rentals cost $4.95 and the cost to rent a canoe is $9.95. Each person would need a tube, but canoes hold up to three individuals. In order to budget for your day on the river, consider the following questions.

1. Write an equation that shows how many tubes t and canoes c you would need to accommodate your group.

2. Write an equation that expresses how much the tubes and canoes will cost and remain within the confines of your recreational budget.

3. According to the equations from Exercises 1 and 2, how many tubes and canoes can you rent? Show your work.

Another activity that your group is considering is the amusement park on the outskirts of the forest. The bumper cars cost $6.00 and two people can ride in each car. Another choice is the water slide. This cost is $8.00 per person.

4. Write an equation that shows how many bumper car tickets b and water slide passes w you would need to accommodate your group.

5. Write an equation that expresses how much the bumper car tickets and water slide passes would cost and remain within the confines of your recreational budget.

6. Use a different method than the one used in question 3 to determine how many bumper car tickets and water slide passes you can purchase. Show your work.