Linear Functions Assignment

Name

1) The cost to rent a banquet hall for grad is determined by a linear function. If 40 people attend, the cost would be \$3040. If 200 people attend, the cost would be \$4000.

a) What rule represents this scenario?

- b) How much would the hall cost if 175 people attended?
- c) How many people would have attended if the hall cost \$3700?

2) The number of litres left in a car's gas tank depends on the number of kilometers driven. The situation can be described using a linear function. If 10 km are driven, there will be 49 litres left in the tank. If 300 km are driven, there will be 20 litres left in the tank.

- a) What rule represents this scenario?
- b) How many litres would be left is 460 km were driven?
- c) How many km were driven if there were 30 litres left in the tank?

3) You have applied for part time jobs and have been offered a position with two different stores. Store 1: a weekly pay of \$40 plus \$12.50 per hour.

Store 2: if you work 4 hours you will earn \$70 and if you work 12 hours you will earn \$190.

- a) Which company is best if you work 9 hours?
- b) Which company is best if you work 13 hours?