

Name: \_\_\_\_\_

This is an experiment in the economics of group decision making. The experiment will occur over a sequence of 8 decision-making periods.

Suppose there is a proposal to build a public park in your neighborhood. The cost of building this park is going to be covered by voluntary contributions from people in your neighborhood. At the start of every period each property owner in the neighborhood will have a budget of \$50. In each period, every individual has a choice between spending a portion or all of his/her money on projects that improve the condition of his/her own house **or** make a contribution toward building the neighborhood park.

Every dollar spent on home improvement will increase the market value of your house by \$1.00. On the other hand, having a park in the neighborhood will also increase the market value of your house. Specifically, each dollar contributed toward building the park will increase the value of all neighborhood properties by a total of \$3.00. This total will be divided equally among all neighborhood houses.

### YOUR RECORD SHEET

	A	B	C	D	E
ROUND	YOUR CONTRIBUTIONS TO THE PARK	YOUR PRIVATE EARNINGS FROM HOME IMPROVEMENTS (= \$50 - A)	TOTAL CONTRIBUTIONS TOWARD PARK	YOUR SHARE OF EARNINGS FROM PARK	TOTAL EARNINGS (= B+D)
1					
2					
3					
4					
5					
6					
7					
8					

Bonus Points: At the end of the experiment, one round will be randomly chosen to determine your bonus point payoff.

$$\text{Bonus} = (0.02)(\text{Total Earnings})$$

## VCM Lab Report

Name(s):

1. *Experimental conditions.* The following parameter set describes the experimental conditions in which you participated.

Number of Households	
Rounds	8
Budget Per Person	\$50
Private Return Per \$ Spent on Home	\$1.00
Neighborhood Return Per \$ Spent on Park	\$3.00

Formulas:

$X$  = total dollars contributed toward building the park

Total Neighborhood Return =  $3X$

Individual share of total neighborhood return =  $3X / (\text{number of houses})$

2. *Preliminary Calculations*

Using the data from above, complete the table below by calculating the earnings for a single decision-making round under the following situations (in each case, assume that all households contribute all of their budget into the designated accounts):

	<b>Everybody contributes all of his/her budget to the park</b>	<b>Everybody spends all of his/her budget on his own house</b>	<b>You spend all of your budget on your own house, everybody else contributes all of his/her budget to the park</b>
Total Dollars Contributed to Park			
Total Neighborhood Return			
Your Share of Neighborhood Return			
Your Private Earnings from Home Improvements			
Your Total Earnings			

- a) Which situation leads to the largest total individual earnings?
- b) Which situation leads to the smallest total individual earnings?

3. *Analyzing the experimental data.*

a) Use the data from the experiment (posted online) to complete the table below.

Round	1	2	3	4	5	6	7	8
Percentage of Total Available Dollars Contributed to Park								
# People Who Contributed \$0								

b) Was free-riding exhibited during this experiment? How does the data in the table above either support or refute the existence of free-riding? Explain.

c) Did the ability to freely communicate with other neighbors during the decision making process reduce the free-rider phenomenon? Was it a lasting effect? Explain why or why not.

d) Speculate as to which of the following groups are more likely to free-ride? Explain why you believe so.

i) Men or women?

ii) Republicans or Democrats?

iii) Identify one other group comparison that might explain differences in free-riding behavior. Explain your choice.