ACTIVITY: The making of loans depends on statistics describing the probability that customers will pay back loans. In this activity, you are given data on how much loan customers paid back on several loan types. Your group will start with a certain amount of money. Each of you will have the same amount, say $1.00. As a group, you choose what loans to make up to the total amount $1.00. Each person in your group is making the same loans that you decide on as a group, and you will all receive the same returns.

There are two rounds of loans. In the each round, you have two types of loans you can give out. You are given some data about how much money was made off each type of loan in the past. Use this information any way you like to decide how much money you to loan out for each type of loan. You can choose not to loan some or all of your money, too.

Data for Round 1:

Loan Type I Return (on loan of $1.00)

Customer	A	B	C
Paid Back	$1.60	$2.00	$1.20

Loan Type II Return (on loan of $1.00)

Customer	A	B	C	D	E
Paid Back	$1.65	$1.50	$1.35	$1.50	$1.35

Specifying Loans for Round 1:

Write the names of people in your group and the amount your group is investing in Loan Type I and Loan Type II on a 3 x 5 index card. Hand in the cards before the processing occurs.

Payoffs will be rounded to the nearest convenient amount specified by the teacher.

Data for Round 2:

Some statistical quantities have been computed for you in this round. You may find this information helpful.

Loan Type III Return (on loan of $1.00)

Customer	A	B	C
Paid Back	$0.40	$2.00	$1.60

$n = 3$ customers

$\bar{x} = \$1.33$ (average amount paid back on a $1.00 loan)

$s = \$0.83$ (sample standard deviation of amount paid back on a $1.00 loan)

Loan Type IV Return (on loan of $1.00)

Customer	A	B	C	D	E	F	G	...
Paid Back	$1.40	$1.30	$1.70	$1.20	$2.20	$1.60	$1.80	...

$n = 16$ customers

$\bar{x} = \$1.47$ (average amount paid back on a $1.00 loan)

$s = \$0.21$

Specifying Loans for Round 2:

Each person in your group may loan up to the amount you each had after round 1. As in round 1, everyone in your group will make the same loans and receive the same payments. Write the names of people in your group and the amount your group is investing in Loan Type III and Loan Type IV on your 3 x 5 index card. Hand in the cards before the processing occurs.

Payoffs will be rounded to the nearest convenient amount specified by the teacher.