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- **Investments:** You begin the (first and only) round with a number of "tokens," which may either be kept or invested. The 4 people you are matched with will decide how many of their tokens to keep, and how many to invest. You will not be able to see the others' decisions until after your decision is submitted.
- **Earnings:** The payoff to you will equal:
\$1.00 for each token you keep,
\$0.40 for each token you invest, and
\$0.40 for each token invested by the 4 other people who you are matched with.
- **Note:** The total number of tokens invested gets doubled and divided equally among the 5 people in the group, so the per capita return on investment is 2/5 or \$0.40 .

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Example: Suppose you have only two tokens for the round, and the earnings from tokens kept, invested, and invested by the others are \$1.00, \$0.40, and \$0.40 respectively.

- If you keep both tokens, then your earnings will be: $\$1.00 \times 2 = \2.00 from the tokens kept, plus \$0.4 times the number of tokens invested by the other people in your group.
- If you invest both tokens, then your earnings will be: $\$0.40 \times 2 = \0.80 from the tokens invested, plus \$0.4 times the number of tokens invested by the other people in your group.
- If you keep one and invest one, then your earnings will be:
 $\$1.00 \times 1 = \1.00 from the token kept, plus
 $\$0.40 \times 1 = \0.40 for the token invested, plus
\$0.4 times the number of tokens invested by the other people in your group.

Note: In each of the 3 above cases, what you earn from the others' investments is: \$0.00 if the others invest 0 tokens, \$0.40 if the other people invest 1 token (in total) and keep the rest, \$0.80 if the other people invest 2 tokens (in total), etc.

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- There will only be **1 round**, and you will begin with an endowment of **3 tokens**, each of which can either be kept or invested. The 4 other people in your group will also have 3 tokens.
- Everybody earns money in the same manner: \$1.00 for each token kept, \$0.40 for each token invested, and \$0.40 for each token invested by the 4 other people.

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In the following examples, please select the best answer.

Earnings reminder: **\$1.00** for each token you keep, **\$0.40** for each token you invest, and **\$0.40** for each token invested by others.

Question 1: Suppose you invest X of your 3 tokens and the total number invested by the 4 other people is Y tokens.

- a) Then you earn $(3 - X) * \$1.00 + X * \0.40 .
- b) Then your earnings will be at least as high as $(3 - X) * \$1.00 + X * \0.40 .

Submit Answers

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Question 1: Suppose you invest X of your 3 tokens and the total number invested by the 4 other people is Y tokens.

- (a) Then you earn $(3 - X) * \$1.00 + X * \0.40 .
- (b) Then your earnings will be at least as high as $(3 - X) * \$1.00 + X * \0.40 .**

Your answer, **(b)** is **Correct**, and how much more you earn depends on the **others' investments**.

Continue

Instructions Summary (ID = 1)

- You will be matched with 4 other people, selected at random. There will only be a **single round** in this part of the experiment.
- All people will begin with **3 tokens** which they may keep (and earn **\$1.00** each) or invest (and earn **\$0.40** each), knowing that they will also earn **\$0.40** for each token invested by other people in the group.
- **Note:** The total number of tokens invested gets **doubled and divided equally** among the 5 people in the group, so the per capita return on investment is $2/5$ or $\$0.40$.
- There will only be a **single round** in this part of the experiment. Your earnings will be calculated for you and will be shown in the total earnings column of the record form that you will see next.

Finished with Instructions

Begin Part 2: Some payoff parameters have changed.

- **Group Size:** remains unchanged at **5 people** per group.
- **Token Endowment:** This remains unchanged at **3 tokens** per round.
- **Value of Tokens Kept:** will remain unchanged at **\$1.00** per token you keep.
- **Return from Own Investment:** will remain unchanged at **\$0.40** per token you invest.
- **Return from Other Investments:** will remain the same at **\$0.40** per token invested by someone else in your group.
- **Number Rounds:** There will only be a **single round** in this (final) part.
- **Punishment Points:**

	Punishment Points										
Punishment Points:	0	1	2	3	4	5	6	7	8	9	10
Receiver Cost:	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
Sender Cost:	\$0.00	\$0.20	\$0.40	\$0.60	\$0.80	\$1.00	\$1.20	\$1.40	\$1.60	\$1.80	\$2.00

- **Punishment Points:** After investment decisions for all members of your group are revealed at the end of the round, you may send up to **10 punishment points**, which may directed to one or more others in your group. If you send no points, the cost to you is \$0, and as you send more points, your cost increases, as shown in the bottom row of the table. The others can also send points to you, and their sending costs are determined in the same manner.
- **Effect of Points Received:** Whoever receives points has their earnings for the round reduced by the relevant fraction shown in the second row of the table. For example, if you send 1 point to another person, their earnings will be reduced by a factor **0.1**, which is equivalent to multiplying their earnings by **0.9**. If that person receives 1 point from you and 1 point from another person, then their earnings reduction factor is given in the column for 2 points: **0.2**, etc. When you receive points, your earnings are reduced in the same manner.
- **Earnings Adjustment:** If you send points, the cost of the total number of points that you send will be deducted from your earnings. If you receive points, your earnings (after costs have been deducted) will be reduced by a factor that depends on the total number of points received.