## **Experimental Instruction**

#### **General Instructions**

Thank you for participating in the experiment. You are about to take part in a decision-making experiment, in which your earnings will depend partly on your decisions, partly on the decision of others, and partly on chance.

The entire session will take place through computer terminals, and all interactions between participants will be conducted through the computers. Please do not talk or in any way try to communicate with other participants during the session.

The main task of the experiment consists of 60 matches. Before the main task, you will be asked to complete some comprehension questions. If you have any questions, please raise your hand and the question will be answered so that everyone can hear the answer.

In this experiment, you will earn "points" in each match. Each point has a value of \$0.02. That is, every 100 points generates \$2 in earnings for you. At the end of the experiment, the computer will randomly select 10 of 60 matches to determine your earnings. Your earnings from your decisions will be the sum of the earnings in the 10 matches that are randomly selected for payment. In addition to the earnings from your decisions, you will receive a show-up fee of \$10. Your final earnings will be rounded up to the nearest dollar amount. All your earnings will be paid in cash privately at the end of the experiment.

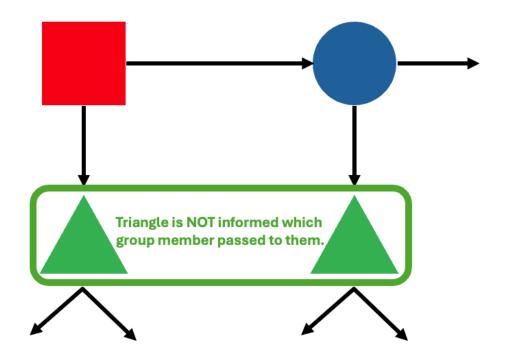
#### Main Task

## **Roles and Groups**

- 1. At the beginning of each match, you will be randomly assigned one of the three roles: square ( $\Box$ ), circle ( $\bigcirc$ ), or triangle ( $\triangle$ ), with equal probability. This means that your role may differ in every match.
- 2. In each match, one square ( $\square$ ), one circle ( $\bigcirc$ ), and one triangle ( $\triangle$ ) will form a group. The points you earn depend on your own decision and the decisions of your group members. At the beginning of each match, you will be randomly paired with two other participants. This means that your group members may differ from those in previous matches.

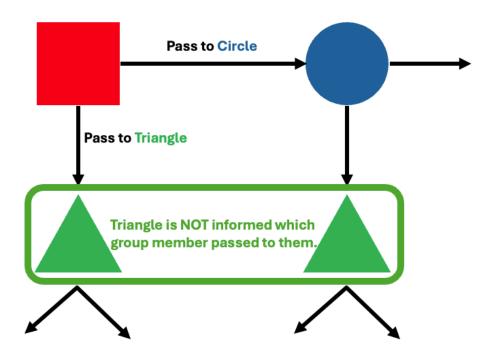
## **Match**

1. Each match in this experiment is represented by the flow chart shown below.



## Decisions for Square ( $\square$ ):

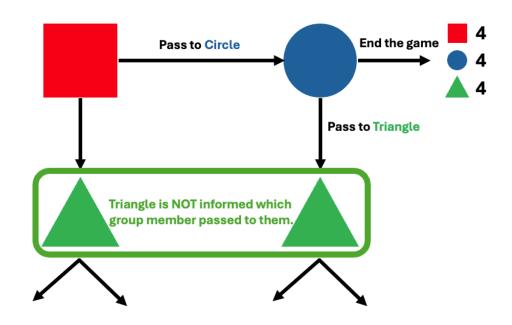
Square ( $\square$ ) has two choices: either "Pass to Circle ( $\bigcirc$ )" or "Pass to Triangle ( $\triangle$ )," as shown in the figure below.



# Decisions for Circle (○):

Circle (O) has two choices: either "End the game" or "Pass to Triangle ( $\triangle$ )." It is important to note that Circle (O)'s decision will not affect the outcome if Square ( $\square$ ) chooses "Pass to Triangle ( $\triangle$ )."

If Square ( $\square$ ) chooses "Pass to Circle ( $\bigcirc$ )," and Circle ( $\bigcirc$ ) chooses "End the game," then Square ( $\square$ ) will earn 4 points, Circle ( $\bigcirc$ ) will earn 4 points and Triangle ( $\triangle$ ) will earn 4 points in this match.

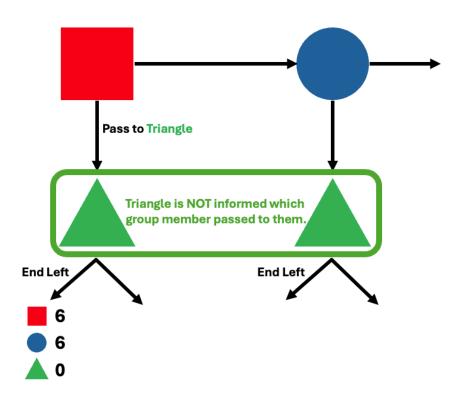


#### Decisions for Triangle ( $\triangle$ ):

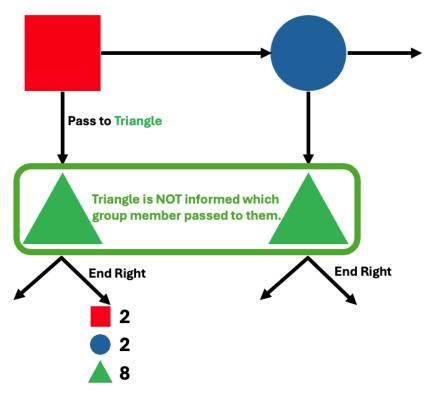
Triangle ( $\triangle$ ) has two choices: either "End Left" or "End Right." It is important to note that Triangle ( $\triangle$ )'s decision will not affect the outcome if neither Square ( $\square$ ) nor Circle ( $\bigcirc$ ) chooses to "Pass to Triangle ( $\triangle$ )." Moreover, Triangle ( $\triangle$ ) is never informed which group member made the decision to pass to them.

If either Square ( $\square$ ) or Circle ( $\bigcirc$ ) chooses "Pass to Triangle ( $\triangle$ )," then Triangle ( $\triangle$ )'s decision will determine the earnings of all three group members. Specifically, there are four possible situations.

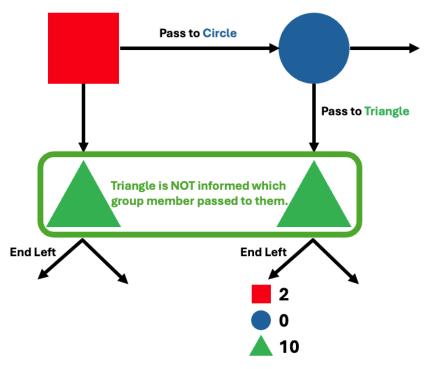
If Square (□) chooses "Pass to Triangle (△)" and Triangle (△) chooses "End Left" then Square (□) will earn 6 points, Circle (○) will earn 6 points and Triangle (△) will earn 0 points in this match.



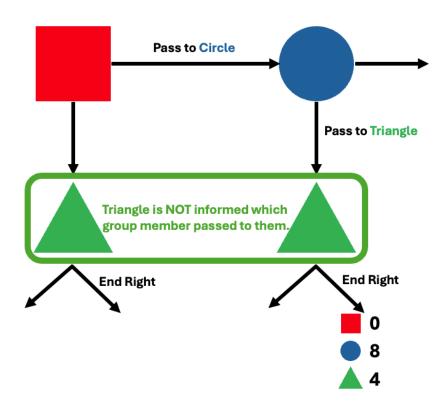
If Square (□) chooses "Pass to Triangle (△)" and Triangle (△) chooses "End Right" then Square (□) will earn 2 points, Circle (○) will earn 2 points and Triangle (△) will earn 8 points in this match.



• If Square ( $\square$ ) chooses "Pass to Circle ( $\bigcirc$ )," Circle ( $\bigcirc$ ) chooses "Pass to Triangle ( $\triangle$ )" and Triangle ( $\triangle$ ) chooses "End Left" then Square ( $\square$ ) will earn 2 points, Circle ( $\bigcirc$ ) will earn 0 points and Triangle ( $\triangle$ ) will earn 10 points in this match.



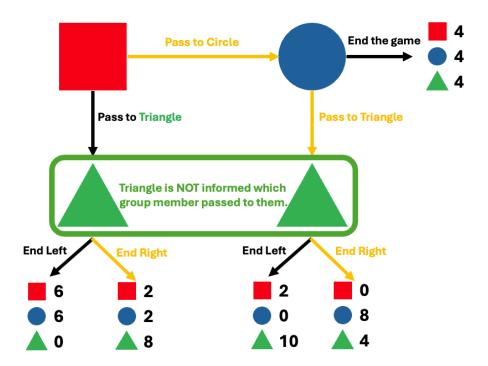
If Square (□) chooses "Pass to Circle (○)," Circle (○) chooses "Pass to Triangle (△)" and Triangle (△) chooses "End Right" then Square (□) will earn 0 points, Circle (○) will earn 8 points and Triangle (△) will earn 4 points in this match.



- Instead of taking turns to make decisions according to the flow chart, you and the
  other group members will simultaneously choose an action. After all group
  members have submitted their actions, the computer will implement them, and your
  earnings will be determined accordingly.
- 3. After each match, there will be a summary of the match, which includes the decisions of all group members and the points you earned.

## **Highlighting Tool**

In each match of the experiment, the flow chart will be displayed on the screen. To help you make your decision, you can highlight any arrow of the flow chart by simply clicking on it, as demonstrated in the screenshot below. You can unhighlight an arrow by either clicking it again or by clicking the other arrow associated with that group member.



Please note that the highlighting tool is provided solely to help you think through your own decision and others' decisions. **The points you earn in a match depend only on the choice you submit, not on how you highlight the arrows.** To submit your choice, select one of your available actions at the bottom of the screen and click "Confirm."

## **End of the Experiment**

- At the end of the experiment, the computer will randomly select 10 of 60 matches to determine your earnings. Your earnings from your decisions will be the sum of the earnings in the 10 matches that are randomly selected for payment. Your earnings for each selected match will depend on your choices and the choices of the other group members in that match.
- 2. Your final earnings will be displayed on the screen at the end of the experiment. Please record your earnings on the payment sheet provided on your desk and hand it to the experimenters to receive your payment.

Please raise your hand if you have any questions. The question will be answered so that everyone can hear the answer.