Online Appendix to
The Control Premium: A Preference for Payoff Autonomy
David Owens, Zachary Grossman, and Ryan Fackler

Quizzes and Answers

Question Number	Question Text	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5	Correct Answer Number
1	At my favorite fruit stand in Puzzleland, an orange costs 18 cents, a pineapple costs 27 cents, and a grape costs 15 cents. Using the same logic, how much does a mango cost?	7 cents	11 cents	15 cents	18 cents	24 cents	3
2	Before losing my wallet, I made two purchases. The first purchase cost exactly 10% of the original amount in my wallet. The second purchase cost exactly 10% of what I had left. The amount of the two purchases totaled $19. How much money was left in my wallet when I lost it?	$31	$50	$81	$100	$131	3
3	I stroll daily for 12 miles at a speed of 2 miles per hour. If I jogged three times faster, how much time would I save?	1 hour	2 hours	3 hours	4 hours	6 hours	4
4	Margot likes knights but not battlers. She likes writing but not typing. She likes to listen but not to sing. What type of author does she like?	unknown	famous	contemporary	dramatic	romantic	1
5	The Great Detective is in pursuit of the guilty party (or parties). He is now interrogating three suspects. George says "I'm innocent - Jane is too." Jane says, "Sally did it, and George is innocent." Sally says, "I'm innocent and Jane did it." The guilty party (or parties) told only lies, and the innocent ones told the truth. Who is the perpetrator (or perpetrators)?	George	Jane	Sally	George and Jane	George and Sally	3
6	The following words below have one significant feature in common which distinguishes them from the fifth word. Which is the odd man out?	REACT	TRACE	CARTE	CATER	SCARE	5
7	Which set of lettters would logically come next in the following sequence? A Y D V G S J P M M P J _ _	R K	S G	R S	S I	X Y	2
8	Cleaning out your couch cushions, you found exactly the same number each of nickels, dimes and quarters. How much money did you find?	$2.60	$3.00	$3.40	$3.50	$3.60	5
9	Tom is younger than Rose, but older than Will and Jack, in that order. Rose is younger than Susie, but older than Jack. Jack is younger than Jim. Susie is older than Rose, but younger than Jim. Jim is olde than Tom. Who is the oldest?	Rose	Will	Jack	Jim	Susie	4
10	You can buy 4 chocolate bars and 3 peanut butter cups for 50 cents. You can buy 3 chocolate bars and 4 peanut butter cups for 48 cents. What is the greatest number of TOTAL pieces of candy that you can buy for 50 cents?	7	8	9	10	12	2
1A	If you count from 1 to 100, how many 7's will you pass on the way?	10	11	19	20	21	4
2A	Jake's jalopy uses 10 gallons of gas for a trip of 150 miles. Sam's speedster gets half the mileage that Jake's does. Hal's heap uses 10 gallons for two thirds the distance that Jake can go with his jalopy. How many gallons does Hal need to go 250 miles?	10 Gallons	12.5 Gallons	20 Gallons	25 gallons	50 gallons	4
3A	If through and threw are pronounced the same, cross out all of the even numbers in the line below. If they are not, cross out all of the odd numbers. If Albany is the capital of New York State, add all of the numbers that are left. If it is not, multiply all of the numbers left. Your answer? 1 2 3 1 2 3 1 2 3 1 2 3	16	8	256	64	32	1
4A	A man moors his boat in a harbor at high tide. A ladder is fastened to the boat, with three rungs showing. The rungs are twelve inches apart. At low tide the water level sinks twenty feet. How many rungs of the ladder are showing now?	3	8	14	20	25	1
5A	A man bets $24 and gets back his original bet and $48 additional. He spends 25 percent of his winnings at a restaurant to celebrate, and 50 percent of his winnings to buy a present for his wife because he was so late, and his salary was $240, from which he made his original bet. How much money does he have left when he finally arrives home?	$240	$244	$252	$258	$264	3
6A	Which number in the following series of numbers does not belong? (1, 3, 5, 9, 11	1	3	5	9	11	4
7A	What word is the opposite of the following scrambled word? WACCORDIE	INDUSTRY	SYMPATHY	BRAVERY	LAZINESS	SIMILARITY	3
8A	Robert and Rose went shopping for presents together. They had a total of $264 between them. Rose had $24 more to begin with but she spent twice as much as Robert and ended up with two-thirds as much money as Robert. How much did Robert spend?	$48	$72	$120	$96	$56	1
9A	In a foreign language, "fol birta klar" means "shine red applies." The phrase "pirt klar farn" means "big red bicycles," and "obirts fol pirt" means "shine bicycles often." How would you say "big apples" in this language?	"fol klar"	"birta farn"	"obirts farn"	"birta pirt"	"pirt fol"	2
10A	What is the next entry in the following sequence: 2, T, 4, F, 8, E, 16, S, 32, T, 64, _____	T	F	E	R	S	5
1B	If 8-22-5-22-13 equates to seven, and 7-4-12 makes two, how would you write ten?	12-4-14	7-22-13	7-22-14	20-5-14	20-5-13	2
2B	A girl decides to take a long walk in the country and visit a friend on the way. She walks at a steady pace of 2 and a half miles per hour. She spends 4 hours walking over to her friend's house; she has a cup of coffee and a sandwich and talks to her friend all of which occupies an hour, and then her friend runs her home in the car, over some rough road, at 20 miles per hour. She gets home at 2:30 in the afternoon. When did she leave her house in the morning?	9AM	8AM	7AM	9:30AM	10:30AM	1
3B	You have 24 socks in a drawer, 6 each of brown, black, white and red. How many socks must you take out of the drawer, without looking, to be sure of having a matched pair (of any color)?	5	4	9	8	2	1
4B	Which of the lettered words could logically come next in the following sequence? APE BIRD CAN DIG EA?	MAN	HAT	CARTE	SEA	FIG	5
5B	A man goes to visit his friend thirty miles away. He doesn't mind speeding, so he travels at 60 miles per hour (mph) and arrives in half an hour. On the way back, however, he has a little trouble with his car, and it takes him an hour to reach home. What was his average speed for the round trip?	40 mph	30 mph	45 mph	60 mph	20 mph	1
6B	How many minutes is it before six o'clock if fifty minutes ago it was four times as many minutes past three o'clock?	22	23	24	25	26	5
7B	What is the next number in the following sequence: 1, 2, 6, 30, 60, 180, 900, 1800, 5400, _____	10800	16200	21600	27000	32400	4
8B	If the length of a rectangle is increased by 25% and the width is decreased by 25%, what is the percentage change in its area from its original amount?	-10%	-6.25%	0%	6.25%	10%	2
9B	If 7^33 is divided by 10, what will the remainder be?	0	1	4	7	9	4
10B	Following the pattern shown in the number sequence below, what is the missing number: 1, 8, 27, ? , 125, 21	36	45	46	64	99	4

INSTRUCTIONS: "CHOICE" CONDITION:

Introduction

Thank you for participating in this experiment. Please follow along carefully as the experimenter reads through these instructions. If you have any questions, please do not hesitate to raise your hand.

This is an experiment in the economics of decision-making. A research foundation has provided funds for conducting this research.

For your participation, you will be paid privately and in cash at the end of this session. Your earnings will depend partly on your decisions, partly on the decisions of others, and partly on chance. If you follow the instructions and make careful decisions, you increase your chance of earning more money.

You will receive $5 as a participation fee (simply for showing up on time). Details of how you will make decisions and gain subsequent earnings are provided below.

Four-part experiment

The experiment has four parts, Part 1, Part 2, Part 3 and Part 4. Part 4 is a questionnaire that we ask you to complete while we arrange your payment. Your answers in Part 4 will not affect your payment in any way.

To determine further earnings (beyond the $5 participation fee), you will be randomly assigned to one of 3 Groups. You are equally likely to be assigned to Group 1, Group 2 and Group 3. If you are assigned to Group 1, your earnings will be determined by Part 1 of the experiment. If you are assigned to Group 2, your earnings will be determined by Part 2, and if you are assigned to Group 3, they will be determined by Part 3.

Overview

This experiment consists of two separate 10 question quizzes, Quiz A and Quiz B. The questions of Quiz A are labeled 1A, 2A, 3A....10A, and the questions of Quiz B are labeled 1B, 2B, 3B...10B. In Part 3 of the experiment, you will take ONE of the two Quizzes. Roughly half of the participants in the room will take each quiz. The questions to each Quiz are all multiple-choice with 5 possible answers, and most are logic or mathematics puzzles drawn from Mensa © publications. In Part 3, each participant will have a *full minute* to answer each of the 10 questions of their Quiz, and will have the financial incentive to answer questions correctly.

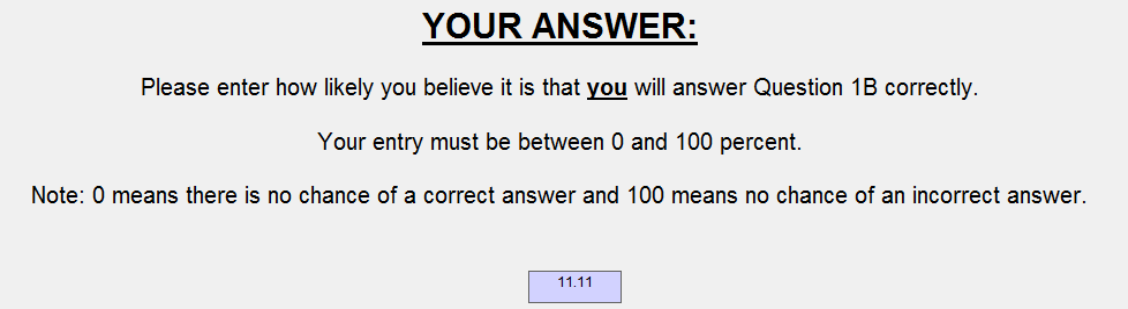
You will be randomly paired with another participant in the room. We will refer to this participant as your **MATCH.** Your **MATCH** will **not** be taking the same quiz as you (if you are taking Quiz A, your match will be taking Quiz B, and vice-versa). The identity of your **MATCH** will remain constant for the entirety of the Experiment, but their identity will never be revealed to you.

At this time, we will read instructions for Part 1 of the experiment. We will read instructions for the remainder of the experiment *after* you have completed Part 1.

Instructions for Part 1

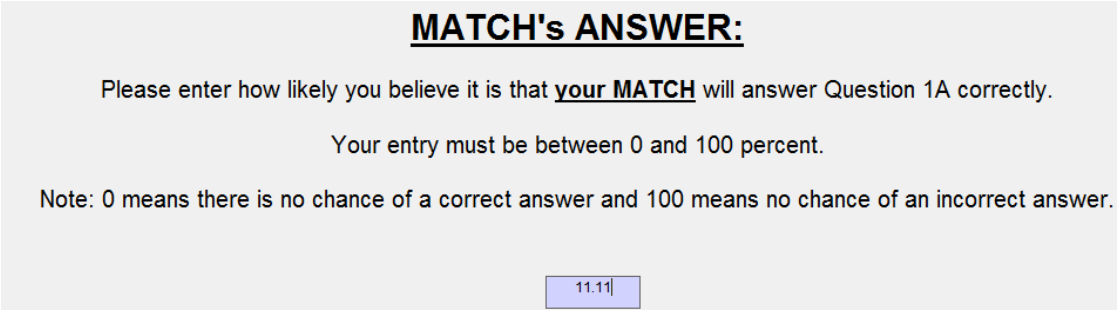
When the experimenter tells you to do so, you will click the **Begin Part 1** button located at the bottom of your computer screen.

When Part 1 begins, you will view Question 1 from YOUR quiz (the one that you will take in Part 3) for 15 seconds. After viewing the question, you will be asked to estimate how likely you are to answer this question correctly in Part 3. Recall that, in Part 3, you will have a full minute (60 seconds) to answer the question, and have a financial incentive to do so. You will enter the likelihood in a screen like the one pictured below.



You will have 15 seconds to enter a likelihood, after the first question disappears. After you have entered the likelihood, press the button market "Next", and you will continue to the next question. If you do not enter a likelihood within 15 seconds, the computer will record the likelihood as 0.00%, and you will automatically move on to the next screen.

The 2nd question that you view will be the Question 1 from your **MATCH**'s quiz. After viewing the question for 15 seconds, along with the 5 possible answers, you will be asked to estimate how likely your **MATCH** is to answer this question correctly in Part 3, when he or she will have a full minute (60 seconds) and a financial incentive to do so. You will enter your estimate in a screen like the one pictured below. Again, you will have to enter an estimate for the likelihood within 15 seconds, and to click "Next" to continue. If you do not enter a likelihood and click "Next" within 15 seconds, the computer will record the likelihood as 0.00%, and will automatically move on to the next screen.



The 3rd through 20th questions will proceed in the same manner as the 1st and 2nd. You will alternate between estimating the likelihood that YOU answer your own quiz questions correctly, and the likelihood that your **MATCH** will answer their quiz questions correctly.

After you have completed the process for each of the 20 questions, Part 1 of the experiment is over. At that time, a screen will appear that reads "We are now going to pause to read the next section of the instructions. Please do not touch your computer until instructed to do so." When you reach this screen, please wait patiently for the rest of the participants to finish Part 1. After they have finished, we will proceed with the next portion of the instructions.

Payment for Group 1

As previously stated, each participant has a 1/3 probability of having their earnings determined by Group 1. If you are assigned to Group 1, your payment will be determined as follows:

One of the 20 questions from the two quizzes will be randomly selected as the PAYMENT QUESTION, with each of the questions being equally likely. You will have estimated the likelihood that either you (your quiz) or your **MATCH** (their quiz) will answer this question correctly, in Part 3. This likelihood will be called L^{PQ}.

We will randomly choose a lottery for you, that will give you a some probability of earning $20. If this probability is *less than* the likelihood, L^{PQ}, that you estimated for the payment question, you will be paid based on the payment question. If this probability is *greater than* L^{PQ}, then you will be paid based on the lottery. Thus, accurately estimating each likelihood will maximize the probability that you earn the $20. Specific details are provided below:

The computer will randomly select two numbers, called the THRESHOLD (referred to as T) and the DETERMINANT (referred to as *D*). Both are equally likely to be any number between 0 and 100.

***L^{PQ}*, *T* and *D* will be used to determine your payment as follows:**

- **If *L^{PQ}<T*, *T* and *D* will be used to determine your payment as follows*:***
  - **You will earn $20 if *T≥D.***
  - **You will earn $0 if *T<D.***

- **If *L^{PQ} ≥ T*, the given answer to the PAYMENT QUESTION will determine your payment as follows*:***
  - **If the PAYMENT QUESTION is from YOUR Quiz:**
    - **You will earn $20 if you answer the PAYMENT QUESTION correctly in Part 3.**
    - **You will earn $0 if you answer the PAYMENT QUESTION incorrectly in Part 3.**
  - **If the PAYMENT QUESTION is from your MATCH's Quiz:**
    - **You will earn $20 if your MATCH answers the PAYMENT QUESTION correctly in Part 3**
    - **You will earn $0 if your MATCH answers the PAYMENT QUESTION incorrectly in Part 3.**

This Group may seem complicated, but what it means for you is simple. You have the highest chance to earn $20 if you estimate each likelihood accurately. The Group has been constructed to ensure that you have the incentive to do so.

Rules

Please do not talk with anyone during the experiment. We ask everyone to remain silent until it is over.

Your participation in the experiment and any information about your earnings will be kept strictly confidential. Your payment's receipt and participant form are the only places in which your name and social security number are recorded.

Once the experimenter instructs you to do so, you may begin with Part 1 of the experiment.

After all participants have finished with Part 1 of the experiment, the Instructor will proceed with the instructions for Part 2.

During Part 1 of the experiment, you may not use a writing instrument of any kind, so please put away all pens and pencils.

INSTRUCTIONS: "PROBABILITY AND CHOICE: BASELINE" CONDITION PART 1:

Introduction

Thank you for participating in this experiment. Please follow along carefully as the experimenter reads through these instructions. If you have any questions, please do not hesitate to raise your hand.

This is an experiment in the economics of decision-making. A research foundation has provided funds for conducting this research.

For your participation, you will be paid privately and in cash at the end of this session. Your earnings will depend partly on your decisions, partly on the decisions of others, and partly on chance. If you follow the instructions and make careful decisions, you increase your chance of earning more money.

You will receive $10 as a participation fee (simply for showing up on time and completing the experiment). Details of how you will make decisions and gain subsequent earnings are provided below. If you leave before the experiment is complete, you will earn $5.

Three-part experiment

The experiment has four parts, Part 1, Part 2, and Part 3. Part 3 is a questionnaire that we ask you to complete while we arrange your payment. Your answers in Part 3 will not affect your payment in any way.

To determine further earnings (beyond the $10 participation fee), you will be randomly assigned to one of 2 Groups. You are equally likely to be assigned to Group 1 or Group 2. If you are assigned to Group 1, your earnings will be determined by Part 1 of the experiment. If you are assigned to Group 2, your earnings will be determined by Part 2.

Overview

This experiment consists of two separate 15 question quizzes, Quiz A and Quiz B. The questions of Quiz A are labeled 1A, 2A, 3A....15A, and the questions of Quiz B are labeled 1B, 2B, 3B...15B. In Part 2 of the experiment, you will take ONE of the two Quizzes. Roughly half of the participants in the room will take each quiz. The questions to each Quiz are all multiple-choice with 5 possible answers, and most are logic or mathematics puzzles drawn from Mensa © publications. In Part 2, each participant will have a *full minute* to answer each of the 15 questions of their Quiz, and will have the financial incentive to answer questions correctly.

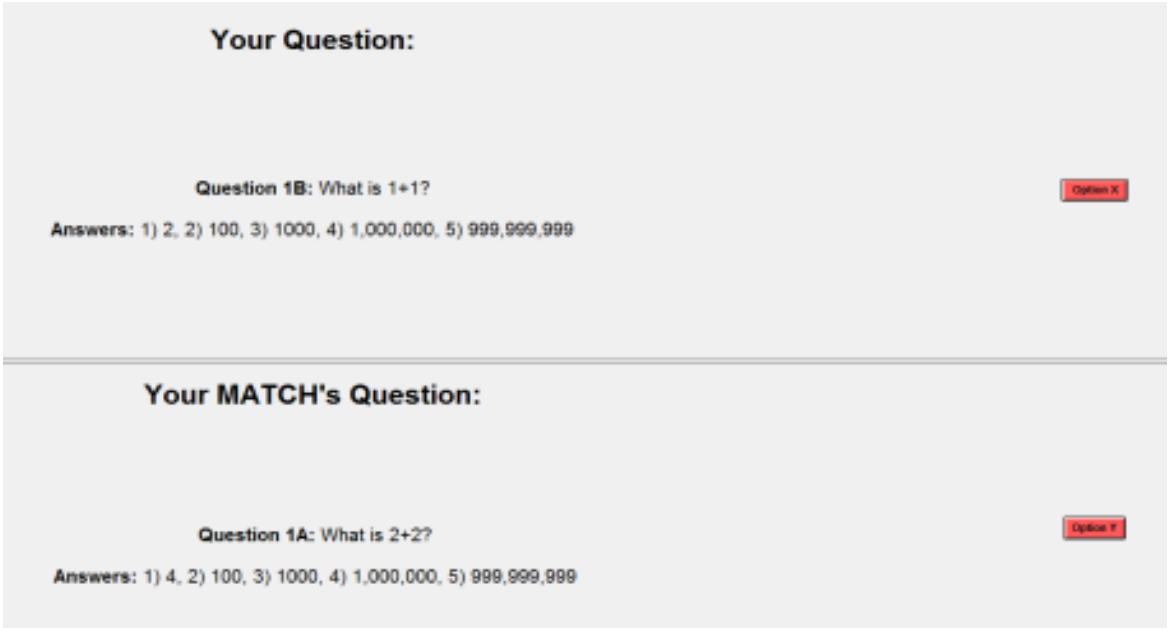
You will be randomly paired with another participant in the room. We will refer to this participant as your **MATCH.** Your **MATCH** will **not** be taking the same quiz as you (if you are taking Quiz A, your match will be taking Quiz B, and vice-versa). The identity of your **MATCH** will remain constant for the entirety of the Experiment, but their identity will never be revealed to you.

At this time, we will read detailed instructions for the experiment.

Instructions for Part 1

When the experimenter tells you to do so, you will click the **Begin Part 1** button located at the bottom of your computer screen.

In Part 1, you will face a series of 15 Choices that will determine your payment *if you are assigned to Group 1*. When Part 1 begins, a screen will appear showing 2 quiz questions: a randomly selected question from YOUR quiz (the one that you will take in Part 2) and a randomly selected question from your **MATCH's** quiz (the one that your **MATCH** will take in Part 2). The questions will appear on your screen for a total of 30 seconds. Your choice will be between two options: Option X and Option Y. Option X pays you $20 if you answer the selected question from YOUR Quiz correctly, and nothing if you answer it incorrectly. Option Y pays you $20 if your **MATCH** answers the selected question from THEIR Quiz correctly, and nothing if they answer it incorrectly. Recall that, in Part 2, both you and your match will have a full minute (60 seconds) to answer your respective questions. The screen that appears will be similar to the one pictured below:



Instructions for Part 2

In Part 2 of the experiment, you will answer each of the 15 questions of your Quiz (which you viewed in part 1). You will have 1 minute to choose an answer to each question. Unanswered questions will be counted as incorrect.

Instructions for Part 3

After you have answered each question from Part 2, you will have completed the parts of the experiment that can affect your payment. Part 3 is a questionnaire that collects a minimum of demographic data, and asks a few questions about your preferences. You will complete this questionnaire while we arrange your payment.

At the end of Part 3, a screen will appear informing you that a Questionnaire is about to begin. When you click on "Begin Questionnaire", the first question will appear. When you have answered all of the questions, a screen informing you about your payment will begin.

Payment for Group 1

Each participant has a 50% of being assigned to Group 1. If you are assigned to Group 1, your earnings will be determined as follows:

The computer will randomly select one of the 15 Choices from Part 1 of the experiment, with each choice being equally likely. We will refer to this Choice as the PAYMENT CHOICE. Your PAYMENT CHOICE will be used to determine your payment as follows:

- If you choose Option X in the PAYMENT CHOICE:
  - You will earn $20 if you answer the question from YOUR Quiz correctly.
  - You will earn nothing if you do not answer the question from YOUR Quiz correctly.

- If you choose Option Y in the PAYMENT CHOICE:
  - You will earn $20 if your **MATCH** answers the question from their Quiz correctly.
  - You will earn nothing if your **MATCH** does not answer the question from their Quiz correctly.

Payment for Group 2

As previously stated, each participant has a 50% chance of being assigned to Group 2. If you are assigned to Group 2, your payment will be determined as follows:

One of the 15 questions from quiz will be randomly selected, with each of the questions being equally likely. If you answer this question correctly, you will earn $20. If you answer this question incorrectly, you will earn $0.

After everyone has finished with Part 2, we will pass around an answer key for the Quizzes. On the answer key, you will write down the identification number from your computer. When you come to the front of the room you will return the answer key, with the identification number written on it, in exchange for an envelope with your payment in it (in cash). You may not take the answer key with you. When you have received your payment, you may exit the room.

Rules

Please do not talk with anyone during the experiment. We ask everyone to remain silent until it is over.

Your participation in the experiment and any information about your earnings will be kept strictly confidential. Your payment's receipt and participant form are the only places in which your name and social security number are recorded.

Once the experimenter instructs you to do so, you may begin with Part 1 of the experiment. During Part 1 of the experiment, you may not use a writing instrument of any kind, so please put away all pens and pencils. After all participants have finished with Part 1 of the experiment, the Instructor will tell you when you may proceed to Part 2. You may use a writing instrument during Part 2. Please turn in any paper that you have used to the Instructor at the end of the experimental session.

INSTRUCTIONS: "PROBABILITY AND CHOICE: BASELINE" CONDITION PARTS 2-4:

We will now continue with the instructions for Parts 2, 3 and 4 of the experiment. There will be no further interruptions in the experiment.

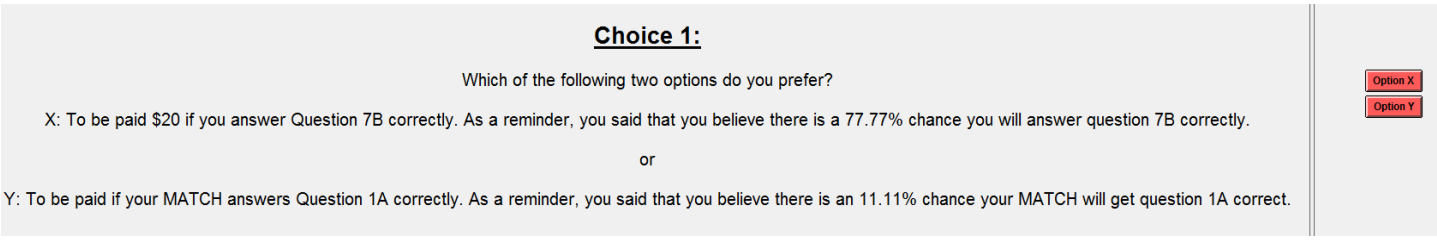
Instructions for Part 2

When the experimenter tells you to do so, you will click the **Begin Part 2** button located at the bottom of your computer screen.

In Part 2, you will face a series of 10 Choices that will determine your payment if you are assigned to Group 2. Each of the 10 Choices will involve 2 of the quiz questions that you viewed in Part 1 of the experiment, 1 from each quiz. Recall that, in Part 1 of the experiment, you estimated the likelihood that you will answer your own quiz questions correctly, and the likelihood that your **MATCH** will answer their quiz questions correctly.

Each of the 10 Choices will ask you to express your preference between two options, Option X and Option Y. Option X pays you $20 if you answer the question from your Quiz correctly, and nothing if you answer it incorrectly. Option Y pays you $20 if your **MATCH** answers the question from their Quiz correctly, and nothing if they answer it incorrectly. Recall that, in Part 3, both you and your match will have 60 seconds to answer each Quiz question.

The 10 Choices will be presented as shown in the graphic below. Note that you will be reminded of the likelihood of a correct answer that you estimated for both yourself and your **MATCH** in Part 1, but not of the question itself.



You should choose Option X if you prefer to be paid $20 only if you answer the first selected question correctly. You should choose Option Y if you prefer to be paid only if your **MATCH** answers the second selected question correctly. You will have 30 seconds to click on either "Option X" or "Option Y". Failure to do so will ensure that you earn nothing from this Choice.

After you have made the 10 Choices in Part 2 of the experiment, you will continue to Part 3, without further interruption. To do so, you will click on the "Begin Part 3" button on the bottom of your computer screen.

Instructions for Part 3

In Part 3 of the experiment, you will answer each of the 10 questions of your Quiz. You will have 1 minute to choose an answer to each question. Unanswered questions will be counted as incorrect.

Instructions for Part 4

After you have answered each question from Part 3 of the experiment, you will have completed all parts of the experiment that can affect your payment. Part 4 is a questionnaire that collects a minimum of demographic data,

and asks a few questions about your preferences. You will complete this questionnaire while we arrange your payment.

At the end of Part 3, a screen will appear informing you that a Questionnaire is about to begin. When you click on "Begin Questionnaire", the first question will appear. When you have answered all of the questions, a screen informing you about your payment will begin.

Payment for Group 2

Each participant has a 1/3 probability of being assigned to Group 2. If you are assigned to Group 2, your earnings will be determined as follows:

The computer will randomly select one of the ten Choices from Part 2 of the experiment, with each choice being equally likely. We will refer to this Choice as the PAYMENT CHOICE. Your PAYMENT CHOICE will be used to determine your payment as follows:

- If you choose Option X in the PAYMENT CHOICE:
  - You will earn $20 if you answer the question from YOUR Quiz correctly.
  - You will earn nothing if you do not answer the question from YOUR Quiz correctly.

- If you choose Option Y in the PAYMENT CHOICE:
  - You will earn $20 if your **MATCH** answers the question from their Quiz correctly.
  - You will earn nothing if your **MATCH** does not answer the question from their Quiz correctly.

Payment for Group 3

Each participant has a 1/3 probability of being assigned to Group 3. If you are assigned to Group 3, your earnings will be determined as follows:

The computer will randomly choose one of the 10 questions of your quiz. If you answered this question correctly, you will earn $20. If you answered this question incorrectly, you will earn nothing. It is important that you know that each question is equally likely to be selected, so you should try your best to answer each question correctly.

After everyone has finished with Part 4, we will pass around an answer key for the Quizzes. On the answer key, you will write down the identification number from your computer. When you come to the front of the room you will return the answer key, with the identification number written on it, in exchange for an envelope with your payment in it (in cash). You may not take the answer key with you. When you have received your payment, you may exit the room.

For the remainder of the experiment, you may use a writing instrument and paper, if you wish. You can take them out at this time.

Once the experimenter instructs you to do so, you may begin Part 2 of the experiment.

INSTRUCTIONS: "PROBABILITY AND CHOICE: REDUCED AMBIGUITY" CONDITION, PART 1 [PARTS 2-4 IDENTICAL TO PCBL]:

Introduction

Thank you for participating in this experiment. Please follow along carefully as the experimenter reads through these instructions. If you have any questions, please do not hesitate to raise your hand.

This is an experiment in the economics of decision-making. A research foundation has provided funds for conducting this research.

For your participation, you will be paid privately and in cash at the end of this session. Your earnings will depend partly on your decisions, partly on the decisions of others, and partly on chance. If you follow the instructions and make careful decisions, you increase your chance of earning more money.

You will receive $5 as a participation fee (simply for showing up on time). Details of how you will make decisions and gain subsequent earnings are provided below.

Four-part experiment

The experiment has four parts, Part 1, Part 2, Part 3 and Part 4. Part 4 is a questionnaire that we ask you to complete while we arrange your payment. Your answers in Part 4 will not affect your payment in any way.

To determine further earnings (beyond the $5 participation fee), you will be randomly assigned to one of 3 Groups. You are equally likely to be assigned to Group 1, Group 2 and Group 3. If you are assigned to Group 1, your earnings will be determined by Part 1 of the experiment. If you are assigned to Group 2, your earnings will be determined by Part 2, and if you are assigned to Group 3, they will be determined by Part 3.

Overview

This experiment consists of two separate 10 question quizzes, Quiz A and Quiz B. The questions of Quiz A are labeled 1A, 2A, 3A....10A, and the questions of Quiz B are labeled 1B, 2B, 3B...10B. In Part 3 of the experiment, you will take ONE of the two Quizzes. Roughly half of the participants in the room will take each quiz. The questions to each Quiz are all multiple-choice with 5 possible answers, and most are logic or mathematics puzzles drawn from Mensa © publications. In Part 3, each participant will have a *full minute* to answer each of the 10 questions of their Quiz, and will have the financial incentive to answer questions correctly.

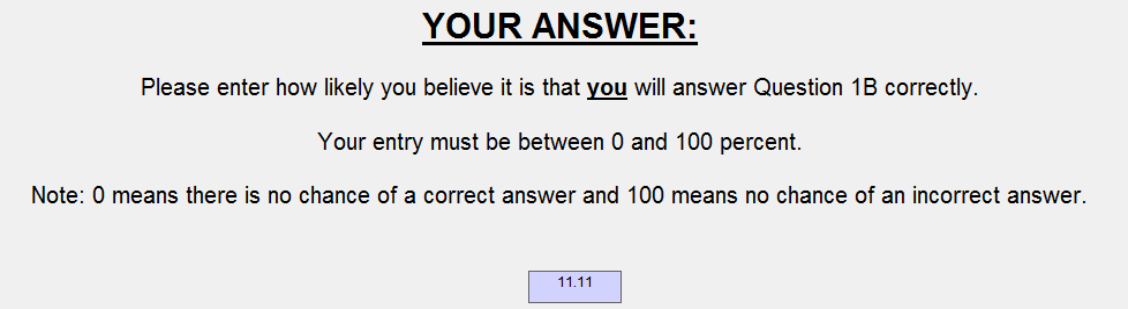
You will be randomly paired with another participant in the room. We will refer to this participant as your **MATCH.** Your **MATCH** will **not** be taking the same quiz as you (if you are taking Quiz A, your match will be taking Quiz B, and vice-versa). The identity of your **MATCH** will remain constant for the entirety of the Experiment, but their identity will never be revealed to you.

At this time, we will read instructions for Part 1 of the experiment. We will read instructions for the remainder of the experiment *after* you have completed Part 1.

Instructions for Part 1

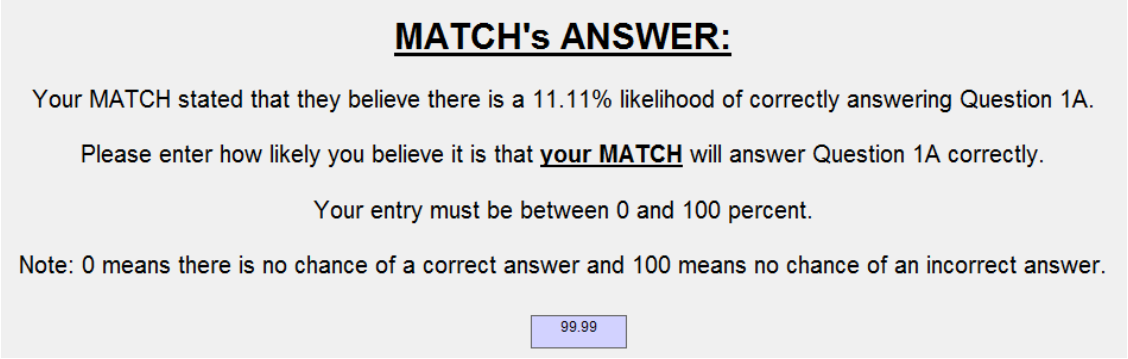
When the experimenter tells you to do so, you will click the **Begin Part 1** button located at the bottom of your computer screen.

When Part 1 begins, you will view Question 1 from YOUR quiz (the one that you will take in Part 3) for 15 seconds. After viewing the question, you will be asked to estimate how likely you are to answer this question correctly in Part 3. Recall that, in Part 3, you will have a full minute (60 seconds) to answer the question, and have a financial incentive to do so. You will enter the likelihood in a screen like the one pictured below.



You will have 15 seconds to enter a likelihood, after the first question disappears. After you have entered the likelihood, press the button market "Next", and you will continue to the next question. If you do not enter a likelihood within 15 seconds, the computer will record the likelihood as 0.00%, and you will automatically move on to the next screen.

The 2nd question that you view will be the Question 1 from your **MATCH**'s quiz. After viewing the question for 15 seconds, along with the 5 possible answers, you will be asked to estimate how likely your **MATCH** is to answer this question correctly in Part 3, when he or she will have a full minute (60 seconds) and a financial incentive to do so. You will enter your estimate in a screen like the one pictured below. Your **MATCH** will have previously estimated the likelihood that they will answer they this question correctly. You will be shown your **MATCH**'s estimate, as displayed below.



Again, you will have to enter an estimate for the likelihood within 15 seconds, and to click "Next" to continue. If you do not enter a likelihood and click "Next" within 15 seconds, the computer will record the likelihood as 0.00%, and will automatically move on to the next screen.

The 3rd through 20th questions will proceed in the same manner as the 1st and 2nd. You will alternate between estimating the likelihood that YOU answer your own quiz questions correctly, and the likelihood that your **MATCH** will answer their quiz questions correctly.

After you have completed the process for each of the 20 questions, Part 1 of the experiment is over. At that time, a screen will appear that reads "We are now going to pause to read the next section of the instructions. Please do not touch your computer until instructed to do so." When you reach this screen, please wait patiently for the rest of the participants to finish Part 1. After they have finished, we will proceed with the next portion of the instructions.

Payment for Group 1

As previously stated, each participant has a 1/3 probability of being assigned to Group 1. If you are assigned to Group 1, your payment will be determined as follows:

One of the 20 questions from the two quizzes will be randomly selected as the PAYMENT QUESTION, with each of the questions being equally likely. You will have estimated the likelihood that either you (your quiz) or your **MATCH** (their quiz) will answer this question correctly, in Part 3. This likelihood will be called L^{PQ}.

We will randomly choose a lottery for you, that will give you a some probability of earning $20. If this probability is *less than* the likelihood, L^{PQ}, that you estimated for the payment question, you will be paid if the PAYMENT QUESTION is answered correctly. If this probability is *greater than* L^{PQ}, then you will be paid based on the lottery, with this probability. Thus, accurately estimating each likelihood will maximize the probability that you earn the $20. Specific details are provided below:

The computer will randomly select two numbers, called the THRESHOLD (referred to as T) and the DETERMINANT (referred to as *D*). Both are equally likely to be any number between 0 and 100.

***L^{PQ}, T* and *D* will be used to determine your payment as follows:**

- **If *L^{PQ}<T, T* and *D* will be used to determine your payment as follows*:***
  - **You will earn $20 if *T≥D.***
  - **You will earn $0 if *T<D.***

- **If *L^{PQ} ≥ T,* the given answer to the PAYMENT QUESTION will determine your payment as follows*:***
  - **If the PAYMENT QUESTION is from YOUR Quiz:**
    - **You will earn $20 if you answer the PAYMENT QUESTION correctly in Part 3.**
    - **You will earn $0 if you answer the PAYMENT QUESTION incorrectly in Part 3.**
  - **If the PAYMENT QUESTION is from your MATCH's Quiz:**
    - **You will earn $20 if your MATCH answers the PAYMENT QUESTION correctly in Part 3**
    - **You will earn $0 if your MATCH answers the PAYMENT QUESTION incorrectly in Part 3.**

This payment scheme may seem complicated, but what it means for you is simple. You have the highest chance to earn $20 if you estimate each likelihood accurately. The payment scheme has been constructed to ensure that you have the incentive to do so.

Rules

Please do not talk with anyone during the experiment. We ask everyone to remain silent until it is over.

Your participation in the experiment and any information about your earnings will be kept strictly confidential. Your payment's receipt and participant form are the only places in which your name and social security number are recorded.

Once the experimenter instructs you to do so, you may begin with Part 1 of the experiment.

After all participants have finished with Part 1 of the experiment, the Instructor will proceed with the instructions for Part 2.

During Part 1 of the experiment, you may not use a writing instrument of any kind, so please put away all pens and pencils.

INSTRUCTIONS: "PROBABILITY AND CHOICE: MINIMAL AMBIGUITY" CONDITION, PART 1:

Introduction

Thank you for participating in this experiment. Please follow along carefully as the experimenter reads through these instructions. If you have any questions, please do not hesitate to raise your hand.

This is an experiment in the economics of decision-making. A research foundation has provided funds for conducting this research.

For your participation, you will be paid privately and in cash at the end of this session. Your earnings will depend partly on your decisions, partly on the decisions of others, and partly on chance. If you follow the instructions and make careful decisions, you increase your chance of earning more money.

You will receive $10 as a participation fee (simply for showing up on time and completing the experiment). Details of how you will make decisions and gain subsequent earnings are provided below.

Five-part experiment

The experiment has 5 parts, Part 1, Part 2, Part 3, Part 4 and Part 5. Part 5 is a questionnaire that we ask you to complete while we arrange your payment. Your answers in Part 5 will not affect your payment in any way.

To determine further earnings (beyond the $10 participation fee), you will be randomly assigned to one of 4 Groups. You are equally likely to be assigned to Group 1, Group 2, Group 3 and Group 4. If you are assigned to Group 1, your earnings will be determined by Part 1 of the experiment. If you are assigned to Group 2, your earnings will be determined by Part 2, and if you are assigned to Group 3 or 4, they will be determined by Part 3 or 4, respectively. You will learn which group you have been assigned to at the END of the experimental session.

Instructions for Part 1

At this time, we will read instructions for Part 1 of the experiment. We will read instructions for the remainder of the experiment *after* you have completed Part 1. When the experimenter tells you to do so, you will click the **Begin Part 1** button located at the bottom of your computer screen.

Part 1 of this experiment is a 10 question quiz. The questions to the Quiz are all multiple-choice with 5 possible answers, and most are logic or mathematics puzzles drawn from Mensa © publications. You will have a full minute (60 seconds) to answer each question.

Payment for Group 1

As previously stated, each participant has a 25% chance of being assigned to Group 1. If you are assigned to Group 1, your payment will be determined as follows:

One of the 10 questions from quiz will be randomly selected, with each of the questions being equally likely. If you answer this question correctly, you will earn $20. If you answer this question incorrectly, you will earn $0.

Rules

Please do not talk with anyone during the experiment. We ask everyone to remain silent until it is over.

Your participation in the experiment and any information about your earnings will be kept strictly confidential. Your payment's receipt and participant form are the only places in which your name and social security number are recorded.

Once the experimenter instructs you to do so, you may begin with Part 1 of the experiment.

After all participants have finished with Part 1 of the experiment, the Instructor will proceed with the instructions for Part 2.

During Part 1 of the experiment, you may use a writing instrument and paper.

Overview

This remainder of this experiment consists of two quizzes similar to the one in part 1, Quiz A and Quiz B. The questions of Quiz A are labeled 1A, 2A, 3A....10A, and the questions of Quiz B are labeled 1B, 2B, 3B...10B. In Part 4 of the experiment, you will take ONE of the two Quizzes. Roughly half of the participants in the room will take each quiz. In Part 3, each participant will have again a full minute to answer each of the 10 questions of their Quiz, and will have the financial incentive to answer questions correctly.

You will now be randomly paired with another participant in the room. We will refer to this participant as your **MATCH.** Your **MATCH** will **not** be taking the same quiz as you (if you are taking Quiz A, your match will be taking Quiz B, and vice-versa). The identity of your **MATCH** will remain constant for the entirety of the Experiment, but their identity will never be revealed to you.

INSTRUCTIONS: "PROBABILITY AND CHOICE: MINIMAL AMBIGUITY" CONDITION, PART 2:

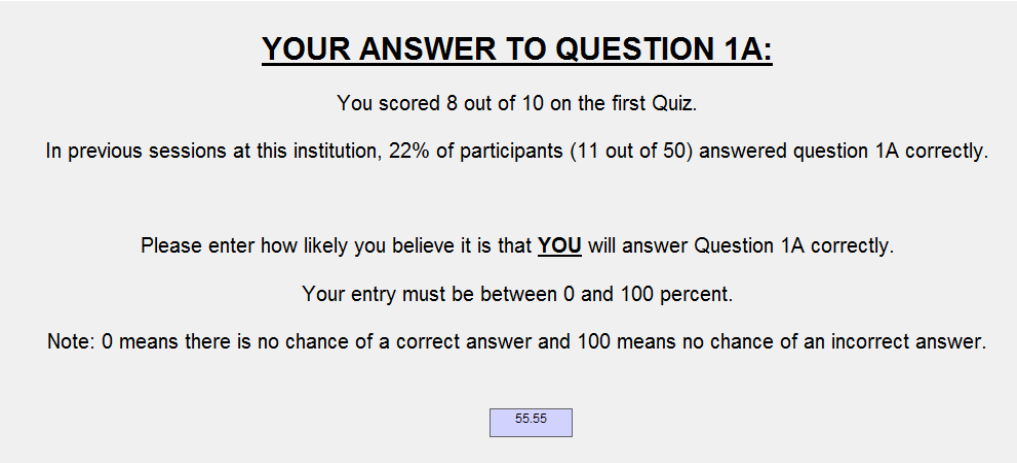
Instructions for Part 2

When the experimenter tells you to do so, you will click the **Begin Part 2** button located at the bottom of your computer screen.

When Part 2 begins, you will view Question 1 from YOUR quiz (the one that you will take in Part 4) for 15 seconds. After viewing the question, you will be asked to estimate how likely you are to answer this question correctly in Part 4. When you estimate this likelihood, you will be shown the following information:

1. The number of questions that you answered correctly on the first quiz.
2. The proportion of participants that answered this question correctly in previous sessions in this facility.

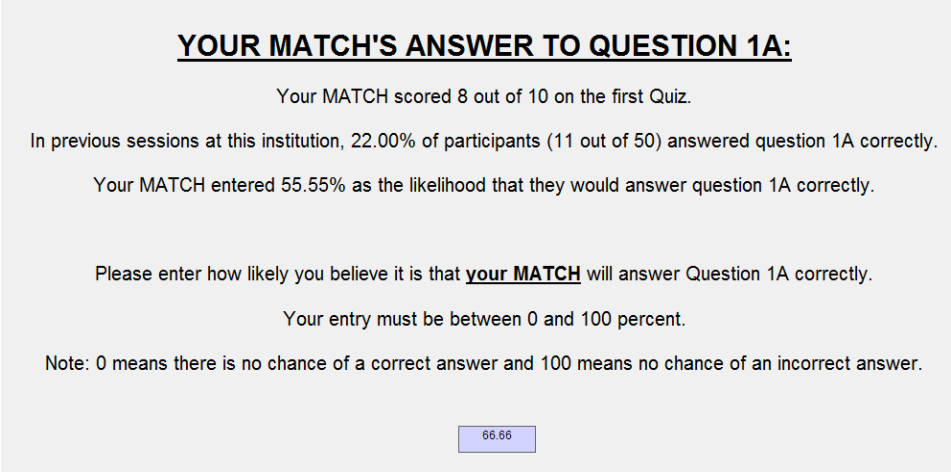
Recall that, in Part 4, you will have a full minute (60 seconds) to answer the question, and have a financial incentive to do so. You will enter the likelihood in a screen like the one pictured below.



You will have 25 seconds to enter a likelihood, after the first question disappears. After you have entered the likelihood, press the button market "Next", and you will continue to the next question. If you do not enter a likelihood within 25 seconds, the computer will record the likelihood as 0.00%, and you will automatically move on to the next screen.

The 2nd question that you view will be the Question 1 from your **MATCH**'s quiz. After viewing the question for 15 seconds, along with the 5 possible answers, you will be asked to estimate how likely your **MATCH** is to answer this question correctly in Part 4, when they will have a full minute (60 seconds) and a financial incentive to do so. You will enter your estimate in a screen like the one pictured below. When you estimate this likelihood, you will be shown the following information:

1. The number of questions that your **MATCH** answered correctly on the first quiz.
2. The proportion of participants that answered this question correctly, at this facility, in previous sessions.
3. The likelihood that your **MATCH** just estimated for their own correct answer.



Again, you will have to enter an estimate for the likelihood within 25 seconds, and to click "Next" to continue. If you do not enter a likelihood and click "Next" within 25 seconds, the computer will record the likelihood as 0.00%, and will automatically move on to the next screen.

The 3rd through 20th questions will proceed in the same manner as the 1st and 2nd. You will alternate between estimating the likelihood that YOU answer your own quiz questions correctly, and the likelihood that your **MATCH** will answer their quiz questions correctly.

After you have completed the process for each of the 20 questions, Part 2 of the experiment is over. At that time, a screen will appear that reads "We are now going to pause to read the next section of the instructions. Please do not touch your computer until instructed to do so." When you reach this screen, please wait patiently for the rest of the participants to finish Part 2. After they have finished, we will proceed with the next portion of the instructions.

Payment for Group 2

As previously stated, each participant has a 25% of being assigned to Group 2. If you are assigned to Group 2, your payment will be determined as follows:

One of the 20 questions from the two quizzes will be randomly selected as the PAYMENT QUESTION, with each of the questions being equally likely. You will have estimated the likelihood that either you (your quiz) or your **MATCH** (their quiz) will answer this question correctly, in Part 4. This likelihood will be called L^{PQ}.

We will randomly choose a lottery for you, that will give you a some probability of earning $20. If this probability is *less than* the likelihood, L^{PQ}, that you estimated for the payment question, you will be paid if the PAYMENT QUESTION is answered correctly. If this probability is *greater than* L^{PQ}, then you will be paid based on the lottery, with this probability. Thus, accurately estimating each likelihood will maximize the probability that you earn the $20. Specific details are provided below:

The computer will randomly select two numbers, called the THRESHOLD (referred to as T) and the DETERMINANT (referred to as *D*). Both are equally likely to be any number between 0 and 100.

L^{PQ}, *T* and *D* will be used to determine your payment as follows:

- **If $L^{PQ}<T$, *T* and *D* will be used to determine your payment as follows*:***
  - **You will earn $20 if $T \geq D$.**
  - **You will earn $0 if $T<D$.**

- **If $L^{PQ} \geq T$, the given answer to the PAYMENT QUESTION will determine your payment as follows*:***
  - **If the PAYMENT QUESTION is from YOUR Quiz:**

        - **You will earn $20 if you answer the PAYMENT QUESTION correctly in Part 4.**
        - **You will earn $0 if you answer the PAYMENT QUESTION incorrectly in Part 4.**
    - **If the PAYMENT QUESTION is from your MATCH's Quiz:**
        - **You will earn $20 if your MATCH answers the PAYMENT QUESTION correctly in Part 4.**
        - **You will earn $0 if your MATCH answers the PAYMENT QUESTION incorrectly in Part 4.**

This payment scheme may seem complicated, but what it means for you is simple. You have the highest chance to earn $20 if you estimate each likelihood accurately. The payment scheme has been constructed to ensure that you have the incentive to do so.

Rules

Please do not talk with anyone during the experiment. We ask everyone to remain silent until it is over.

Your participation in the experiment and any information about your earnings will be kept strictly confidential. Your payment's receipt and participant form are the only places in which your name and social security number are recorded.

Once the experimenter instructs you to do so, you may begin with Part 2 of the experiment.

After all participants have finished with Part 2 of the experiment, the Instructor will proceed with the instructions for Part 3.

During Part 2 of the experiment, you may not use a writing instrument of any kind, so please put away all pens and pencils.

INSTRUCTIONS: "PROBABILITY AND CHOICE: MINIMAL AMBIGUITY" CONDITION, PARTS 3-5:

We will now continue with the instructions for Parts 3, 4 and 5 of the experiment. There will be no further interruptions in the experiment.

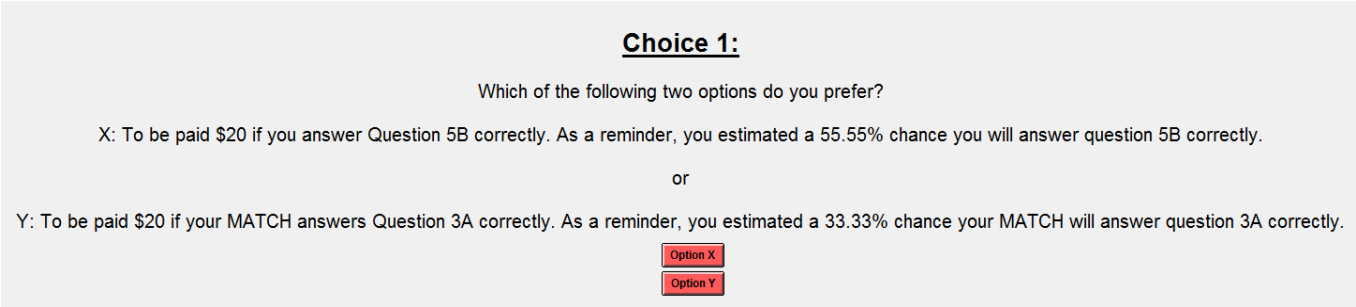
Instructions for Part 3

When the experimenter tells you to do so, you will click the **Begin Part 3** button located at the bottom of your computer screen.

In Part 3, you will face a series of 10 Choices that will determine your payment if you are assigned to Group 3. Each of the 10 Choices will involve 2 of the quiz questions that you viewed in Part 2 of the experiment, 1 from each quiz. Recall that, in Part 2 of the experiment, you estimated the likelihood that you will answer your own quiz questions correctly, and the likelihood that your **MATCH** will answer their quiz questions correctly.

Each of the 10 Choices will ask you to express your preference between two options, Option X and Option Y. Option X pays you $20 if you answer the question from your Quiz correctly, and nothing if you answer it incorrectly. Option Y pays you $20 if your **MATCH** answers the question from their Quiz correctly, and nothing if they answer it incorrectly. Recall that, in Part 4, both you and your match will have 60 seconds to answer each Quiz question.

The 10 Choices will be presented as shown in the graphic below. Note that you will be reminded of the likelihood of a correct answer that you estimated for both yourself and your **MATCH** in Part 2, but not of the question itself, nor of the other information that you had when you estimated the likelihood.



You should choose Option X if you prefer to be paid $20 only if you answer the first selected question correctly. You should choose Option Y if you prefer to be paid only if your **MATCH** answers the second selected question correctly. You will have 30 seconds to click on either "Option X" or "Option Y". Failure to do so will ensure that you earn nothing from this Choice.

After you have made the 10 Choices in Part 3 of the experiment, you will continue to Part 4, without further interruption. To do so, you will click on the "Begin Part 4" button on the bottom of your computer screen.

Instructions for Part 4

In Part 4 of the experiment, you will answer each of the 10 questions of your Quiz. You will have 1 minute to choose an answer to each question. Unanswered questions will be counted as incorrect.

Instructions for Part 5

After you have answered each question from Part 4 of the experiment, you will have completed all parts of the experiment that can affect your payment. Part 5 is a questionnaire that collects a minimum of demographic data, and asks a few questions about your preferences. You will complete this questionnaire while we arrange your payment.

At the end of Part 4, a screen will appear informing you that a Questionnaire is about to begin. When you click on "Begin Questionnaire", the first question will appear. When you have answered all of the questions, a screen informing you about your payment will begin.

Payment for Group 3

Each participant has a 25% of being assigned to Group 3. If you are assigned to Group 3, your earnings will be determined as follows:

The computer will randomly select one of the ten Choices from Part 3 of the experiment, with each choice being equally likely. We will refer to this Choice as the PAYMENT CHOICE. Your PAYMENT CHOICE will be used to determine your payment as follows:

- If you choose Option X in the PAYMENT CHOICE:
  - You will earn $20 if you answer the question from YOUR Quiz correctly.
  - You will earn nothing if you do not answer the question from YOUR Quiz correctly.

- If you choose Option Y in the PAYMENT CHOICE:
  - You will earn $20 if your **MATCH** answers the question from their Quiz correctly.
  - You will earn nothing if your **MATCH** does not answer the question from their Quiz correctly.

Payment for Group 4

Each participant has a 25% of being assigned to Group 4. If you are assigned to Group 4, your earnings will be determined as follows:

The computer will randomly choose one of the 10 questions of your quiz. If you answered this question correctly, you will earn $20. If you answered this question incorrectly, you will earn nothing. It is important that you know that each question is equally likely to be selected, so you should try your best to answer each question correctly.

After everyone has finished with Part 5, we will pass around an answer key for the Quizzes. On the answer key, you will write down the identification number from your computer. When you come to the front of the room you will return the answer key, with the identification number written on it, in exchange for an envelope with your payment in it (in cash). You may not take the answer key with you. When you have received your payment, you may exit the room.

For the remainder of the experiment, you may use a writing instrument and paper, if you wish. You can take them out at this time.

Once the experimenter instructs you to do so, you may begin Part 3 of the experiment.