Welcome!

You are about to participate in an experiment in decision making. The experiment consists of two parts and is expected to last between 2 and 2.5 hours. The instructions are simple, and if you follow them carefully and make good decisions, you may earn a CONSIDERABLE AMOUNT OF MONEY which will be paid to you privately in cash at the end of the experiment.

You will receive a $5 show-up fee which is yours to keep. In addition, you can earn anywhere between $0 and $80 during the experiment.

Caution: This is a serious experiment and talking, looking at others’ screens, or exclaiming out loud are not permitted. Should you have any questions, please raise your hand and an experimenter will come to you. Please do not use Firefox for anything other than the experiment and do not close Firefox.

Instructions: Part I

Introduction

In Part I of the experiment, you will face 20 decision situations. In each one, you will be randomly matched with another participant. You will be matched with a new participant for each decision situation. These matchings will be anonymous. No participants will ever find out who they were matched with in any given decision situation.

In each decision situation, we refer to you as Decision-Maker 1 (DM1) and to the participant you are matched with as Decision-Maker 2 (DM2).

In each decision situation, DM1 and DM2 will separately and independently make decisions called GUESSES. Together, DM1’s guess and DM2’s guess will determine the POINTS that DM1 earns and the POINTS that DM2 earns. (DM1’s points and DM2’s points may be different.)

Earning more points will increase your expected monetary payment at the end of the experiment. The specific way in which points become money will be explained later.
Description of the Task

In each decision situation, each person has her/his own TARGET, LOWER LIMIT, and UPPER LIMIT. Your guess will have to be greater than or equal to your lower limit and less than or equal to your upper limit. DM2’s guess will have to be greater than or equal to DM2’s lower limit and less than or equal to DM2’s upper limit.

In each decision situation, the targets, lower limits, and upper limits will be presented in a table like the following one:

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>100</td>
<td>500</td>
<td>0.7</td>
</tr>
<tr>
<td>DM2 (OTHER PARTICIPANT)</td>
<td>200</td>
<td>800</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Thus, you will be able to see both your target and limits as well as DM2’s target and limits. Similarly, DM2 will be able to see both DM2’s target and limits as well as your target and limits.

Note that the targets and limits in the table above are only an example. All the numbers in the decision situation above were picked randomly and are for illustrative purposes only. In the 20 decision situations in the experiment, the targets and limits will be different and will change from one decision situation to the next. Thus, in each decision situation there will be new targets and limits for both DM1 and DM2.

How Points are Earned

The points you earn in a given decision situation will depend on your guess, DM2’s guess, and your target. Let’s say your guess is $G_{DM1}$, DM2’s guess is $G_{DM2}$, and your target is $T_{DM1}$ and DM2’s target is $T_{DM2}$. Let $D$ be the distance between $G_{DM1}$ (your guess) and $T_{DM1} \times G_{DM2}$ (your target times DM2’s guess).

You earn more points the smaller $D$ is, that is, the closer your guess is to your target times DM2’s guess. In particular, you will earn points that depend on $D$ in a way shown in the graph we have given you. The graph shows how many points you will earn for each value of $D$. (We will round points to the nearest integer.)

For example, if $G_{DM1}$ is exactly equal to $T_{DM1} \times G_{DM2}$, then $D = 0$ and you earn 300 points. If $D = 100$ so that $G_{DM1}$ is 100 away from $T_{DM1} \times G_{DM2}$, you earn 190 points. In general, you earn more points when $D$ is smaller, that is when $G_{DM1}$ is closer to $T_{DM1} \times G_{DM2}$; you earn the maximum points if $D = 0$, that is if $G_{DM1}$ is exactly equal to $T_{DM1} \times G_{DM2}$.
DM2 will earn points analogously, except that DM2’s points will depend on the distance between $G_{DM2}$ and $T_{DM2} \times G_{DM1}$. That is, DM2 will earn more points the closer DM2’s guess is to DM2’s target times your guess.

Are there any questions?

Example

To make sure you understand how your points and DM2’s points are computed, let’s work through an example. All numbers in this example are picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

Consider the following targets and limits:

<table>
<thead>
<tr>
<th></th>
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<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>200</td>
<td>800</td>
<td>0.9</td>
</tr>
<tr>
<td>DM2 (OTHER PARTICIPANT)</td>
<td>300</td>
<td>700</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Suppose you guess $G_{DM1} = 700$ and DM2 guesses $G_{DM2} = 500$.

Let us compute your points. The distance between $G_{DM1} (700)$ and $T_{DM1} \times G_{DM2}$ ($0.9 \times 500 = 450$) equals 250. Referring back to our graph, we see that you earn 75 points.

Now, let’s compute DM2’s points. The distance between $G_{DM2} (500)$ and $T_{DM2} \times G_{DM1}$ ($0.5 \times 700 = 350$) equals 150. Referring back to our graph, we see that DM2 earns 135 points.

Are there any questions?

Converting Points into Money

At the end of the experiment, your points from each decision situation will be converted into money. For each decision situation, you can earn $0 or $2. The probability that you earn $2 will be larger the more points your earned.

In particular, let’s say you earned $P$ points in a given decision situation. Imagine a roulette wheel that is divided into 300 equally large slices, $P$ of which are black
and 300 − \( P \) of which are white. The computer will “spin” such a roulette wheel. If the outcome is in the black area, you earn $2. Otherwise, you earn $0. For example, if \( P = 300 \) (the most attainable points in a decision situation), all slices are black and you earn $2 for sure. If \( P = 150 \), half the slices are black and you earn $2 with a 50-percent chance.

For each of the 20 decision situations, the computer will “spin” the roulette wheel separately and independently. Your monetary earnings for Part I will equal the sum of your monetary earnings from each of the 20 decision situations. For example, if you earned $2 for 12 decision situations and $0 for 8 decision situations, your earnings for Part I will equal $24.

**Final Remarks**

You have 5 minutes for each of the first 3 decision situations, 3 minutes for each of the following 2 decision situations, and 2 minutes for each of the remaining 15 decision situations. For the first few decision situations, the computer will not let you enter your guess immediately. You may have to wait 1 or 2 minutes before entering a guess so that you have time to think about your decision.

Within these time constraints, you can proceed from one decision situation to the next at your own pace. Once you make your guess in a decision situation, you cannot go back to change it. If you finish all 20 decision situations before other participants, you will have to wait for others to finish before the experiment can proceed on to Part II. Therefore, there is no benefit to racing through the decision situations. Instead, you should take your time and think about your decisions carefully.

We will provide you with a calculator. We will also distribute pencils and scratch paper. You are free to use these materials if you find them helpful in any way. We will collect these materials at the end of Part I, but you can have them back at the end of the experiment if you wish.

The next page provides a summary of Part I.
Summary of Part I

In each decision situation,

- you are DM1,
- DM2 is a new randomly chosen participant,
- DM1 (you) and DM2 (other participant) have targets and limits,
- you make a guess between your limits, and
- DM2 makes a guess between DM2’s limits.

Let $D$ be the distance between your guess and your target times DM2’s guess. The number of points you earn depends on $D$ as shown in the graph. You earn more points the smaller $D$ is.

Similarly, DM2 earns more points the closer DM2’s guess is to DM2’s target times your guess.

There will be 20 decision situations which have different targets and limits for DM1 and DM2.
Understanding Test for Part I

Welcome to the Understanding Test! All numbers in this understanding test are picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

All of the questions in the test refer to the following decision situation:

<table>
<thead>
<tr>
<th></th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>200</td>
<td>700</td>
<td>1.2</td>
</tr>
<tr>
<td>DM2 (OTHER PARTICIPANT)</td>
<td>300</td>
<td>800</td>
<td>0.8</td>
</tr>
</tbody>
</table>

QUESTIONS:

1. If DM2 guesses 750, what guess would earn you the most points?_____________
   How many points would you earn by entering that guess?_____________

2. If you guess 600, what guess would earn DM2 the most points?_____________
   How many points would DM2 earn by entering that guess?_____________

3. If DM2 guesses 430, what guess would earn you the most points?_____________

4. If you guess 250, what guess would earn DM2 the most points?_____________

5. If you guess 212 and DM2 guesses 510, how many points do you earn? __________

6. If you guess 640 and DM2 guesses 312, how many points does DM2 earn? __________
Instructions: Part II

Description of the Task

In Part II of the experiment, you will face the same 20 decision situations from Part I. They will appear in the same order as before. The only difference is that now you will be DM2, while DM1, instead of being another participant, will be replaced by the computer. The computer will make the exact same guess that you made when you faced this decision situation in the role of DM1 in Part I.

Your points for each decision situation will be determined analogously as in Part I. That is, you will earn more points the closer your guess is to your target times the computer’s guess. The exact number of points you earn will again be determined according to the graph, where $D$ now stands for the distance between your guess and your target times the computer’s guess. An example should help clarify matters. All the numbers in the example below were picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

Example

Consider the following example decision situation in Part II.

<table>
<thead>
<tr>
<th></th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM2 (You)</td>
<td>100</td>
<td>500</td>
<td>0.8</td>
</tr>
<tr>
<td>DM1 (COMPUTER)</td>
<td>200</td>
<td>800</td>
<td>1.3</td>
</tr>
</tbody>
</table>

You faced this decision situation in the role of DM1 in Part I, and suppose that your guess from Part I was 450. Now in Part II, DM1 is the computer and makes the exact same guess that you made in Part I (450). You are now DM2.

Suppose that you now guess 260. Then, the distance ($D$) between 260 and $0.8 \times 450$ ($0.8 \times 450 = 360$) is 100. Referring to the graph, you earn 190 points for this decision situation in Part II.

Are there any questions?
Final Remarks

To convert the points you earn in Part II into money, we use the same exact procedure as in Part I. You have 3 minutes for each of the first 5 decision situations and 2 minutes for each of the 15 remaining decision situations. For the first few decision situations, the computer will not let you enter your guess immediately. You may have to wait 1 minute before entering a guess so that you have time to think about your decision.

Within these time constraints, you can proceed from one decision situation to the next at your own pace. Once you make your guess in a decision situation, you cannot go back to change it. If you finish all 20 decision situations before other participants, you will have to wait for others to finish before you are dismissed. Therefore, there is no benefit to racing through the decision situations. Instead, you should take your time and think about your decisions carefully.

Summary of Part II

You will be shown the same 20 decision situations from Part I in the same order as before. In each decision situation,

- DM2 (you) and DM1 (the computer) have targets and limits,
- you make a guess between your limits, and
- DM1’s guess is the exact same guess that you made when you faced this decision situation in the role of DM1 in Part I.

The number of points you earn in each decision situation depends on $D$ as shown in the graph. You earn more points the smaller $D$ is.
Understanding Test for Part II

Welcome to the Understanding Test! All numbers in this understanding test are picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

Suppose that in Part II of the experiment you face the following decision situation:

<table>
<thead>
<tr>
<th>DM2 (YOU)</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>700</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>DM1 (COMPUTER)</td>
<td>300</td>
<td>800</td>
<td>0.8</td>
</tr>
</tbody>
</table>

QUESTIONS:

1. Suppose you guessed 550 when you faced this decision situation in the role of DM1 in Part I of the experiment.

What will the computer guess?

What guess in Part II would earn you the most points?

How many points would you earn for this guess?

Suppose in Part II you guess 460. How many points do you earn?

2. Suppose instead you guessed 330 when you faced this decision situation in the role of DM1 in Part I of the experiment.

What will the computer guess?

What guess in Part II would earn you the most points?

How many points would you earn for this guess?

Suppose in Part II you guess 496. How many points do you earn?
Part II Instructions - Replicate

Instructions: Part II

Description of the Task

In Part II of the experiment, you will face the same 20 decision situations from Part I. They will appear in the same order as before. Recall that in Part I you were in the role of DM1 while another participant was in the role of DM2. Let $G_{DM1}$ be the guess you made in a given decision situation in Part I.

For each decision situation you are shown in Part II, your task will be to pick a number $X$ that is as close as possible to $G_{DM1}$, that is, as close as possible to the guess you made in that decision situation in Part I. Let $D$ now be the distance between $X$ and $G_{DM1}$. You earn more points the smaller $D$ is, that is the closer $X$ is to $G_{DM1}$. You maximize your points by entering $X$ equal to $G_{DM1}$. The exact number of points you earn will again be determined according to the graph, where $D$ now stands for the distance between $X$ and $G_{DM1}$. An example should help clarify matters. All the numbers in the example below were picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should pick your numbers in the actual experiment.

Example

Let’s say you faced the following situation in Part I:

<table>
<thead>
<tr>
<th></th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>100</td>
<td>500</td>
<td>0.6</td>
</tr>
<tr>
<td>DM2 (OTHER PARTICIPANT)</td>
<td>200</td>
<td>800</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Suppose that your guess in Part I was $G_{DM1} = 280$. Suppose also that in Part II you entered $X = 480$. Then, $D$ equals the distance between 280 and 480, which is 200. Referring to the graph, you earn points 80. If instead in Part II you entered $X = 180$, then $D = 100$ and you earn 190 points.

Are there any questions?
Final Remarks

To convert the points you earn in Part II into money, we use the same exact procedure as in Part I. You have 3 minutes for each of the first 5 decision situations and 2 minutes for each of the 15 remaining decision situations. For the first few decision situations, the computer will not let you enter your number immediately. You may have to wait 1 minute before entering a number so that you have time to think about your decision.

Within these time constraints, you can proceed from one decision situation to the next at your own pace. Once you pick your number in a decision situation, you cannot go back to change it. If you finish all 20 decision situations before other participants, you will have to wait for others to finish before you are dismissed. Therefore, there is no benefit to racing through the decision situations. Instead, you should take your time and think about your decisions carefully.

Summary of Part II

You will be shown the same 20 decision situations from Part I in the same order as before. For each decision situation,

- you were in the role of DM1,
- you made a guess $G_{DM1}$, and
- you will now pick a number $X$, which will be used to calculate $D$, where $D$ is the distance between $X$ and $G_{DM1}$.

The number of points you earn in each decision situation depends on $D$ as shown in the graph. You earn more points the smaller $D$ is.
Understanding Test for Part II

Welcome to the Understanding Test! All numbers in this understanding test are picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

Suppose you guessed $G_{DM1} = 340$ when you faced the following example decision situation in Part I:

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>100</td>
<td>700</td>
<td>1.2</td>
</tr>
<tr>
<td>DM2 (OTHER PARTICIPANT)</td>
<td>400</td>
<td>800</td>
<td>0.6</td>
</tr>
</tbody>
</table>

QUESTIONS:

1. What number $X$ in Part II would give you the most points?__________
   How many points would you earn for picking this number?__________

2. Suppose that in Part II you enter $X = 640$.
   How many points would you earn for picking this number?__________

3. Suppose that in Part II you enter $X = 540$.
   How many points would you earn for picking this number?__________

4. Suppose that in Part II you enter $X = 240$.
   How many points would you earn for picking this number?__________
Instructions: Part II

Description of the Task

In Part II of the experiment, you will face the same 20 decision situations from Part I. They will appear in the same order as before. The only difference is that now you will be DM2, while DM1, instead of being another participant, will be replaced by the computer. The computer will make the exact same guess that you made when you faced this decision situation in the role of DM1 in Part I. For each of the 20 decision situations you will face, we will remind you of the guess you made when you played this decision situation in Part I. That is, you will always know the computer’s guess before making your guess.

Your points for each decision situation will be determined analogously as in Part I. That is, you will earn more points the closer your guess is to your target times the computer’s guess. The exact number of points you earn will again be determined according to the graph, where $D$ now stands for the distance between your guess and your target times the computer’s guess. An example should help clarify matters. All the numbers in the decision situation below were picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

Example

Consider the following example decision situation in Part II.

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<tr>
<td>DM1 (COMPUTER)</td>
<td>200</td>
<td>800</td>
<td>1.3</td>
</tr>
</tbody>
</table>

You faced this decision situation in the role of DM1 in Part I. Before you make your guess in Part II, you will be told the former guess you made when you faced this decision situation in the role of DM1 in Part I. Suppose that your guess from Part I was 450. Now in Part II, DM1 is the computer and makes the exact same guess that you made in Part I (450). You are now DM2.

Suppose that you now guess 260. Then, the distance ($D$) between 260 and $0.8 \times 450$ ($0.8 \times 450 = 360$) is 100. Referring to the graph, you earn 190 points for
this decision situation in Part II.

Are there any questions?

Final Remarks

To convert the points you earn in Part II into money, we use the same exact procedure as in Part I. The only difference is that now, for each decision situation, you can earn $0 or $1.

You have 3 minutes for each of the first 5 decision situations and 2 minutes for each of the 15 remaining decision situations. For the first few decision situations, the computer will not let you enter your guess immediately. You may have to wait 1 minute before entering a guess so that you have time to think about your decision.

Within these time constraints, you can proceed from one decision situation to the next at your own pace. Once you make your guess in a decision situation, you cannot go back to change it. If you finish all 20 decision situations before other participants, you will have to wait for others to finish before you are dismissed. Therefore, there is no benefit to racing through the decision situations. Instead, you should take your time and think about your decisions carefully.

Summary of Part II

You will be shown the same 20 decision situations from Part I in the same order as before. In each decision situation,

- DM2 (you) and DM1 (the computer) have targets and limits,
- you make a guess between your limits,
- DM1’s guess is the exact same guess that you made when you faced this decision situation in the role of DM1 in Part I, and
- we will remind you of your former guess before you enter your Part II guess.

The number of points you earn in each decision situation depends on $D$ as shown in the graph. You earn more points the smaller $D$ is.
Understanding Test for Part II

Welcome to the Understanding Test! All numbers in this understanding test are picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

Suppose that in Part II of the experiment you face the following decision situation:

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<td>0.8</td>
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QUESTIONS:

1. Suppose you guessed 550 when you faced this decision situation in the role of DM1 in Part I of the experiment.

   What will the computer guess?__________

   What guess in Part II would earn you the most points?__________
   How many points would you earn for this guess?__________

   Suppose in Part II you guess 460. How many points do you earn?__________

2. Suppose instead you guessed 330 when you faced this decision situation in the role of DM1 in Part I of the experiment.

   What will the computer guess?__________

   What guess in Part II would earn you the most points?__________
   How many points would you earn for this guess?__________

   Suppose in Part II you guess 496. How many points do you earn?__________
Welcome!

You are about to participate in an experiment in decision making. The experiment consists of two parts and is expected to last between 2 and 2.5 hours. The instructions are simple, and if you follow them carefully and make good decisions, you may earn a CONSIDERABLE AMOUNT OF MONEY which will be paid to you privately in cash at the end of the experiment.

You will receive a $5 show-up fee which is yours to keep. In addition, you can earn anywhere between $0 and $60 during the experiment.

Caution: This is a serious experiment and talking, looking at others’ screens, or exclaiming out loud are not permitted. Should you have any questions, please raise your hand and an experimenter will come to you. Please do not use Firefox for anything other than the experiment and do not close Firefox.

Instructions: Part I

Introduction

In Part I of the experiment, you will face 20 decision situations. In each decision situation, we refer to you as Decision-Maker 1 (DM1) and to your computer as Decision-Maker 2 (DM2).

In each decision situation, DM1 and DM2 will make decisions called GUESSES. First, DM2 will make its guess, then you will be shown this guess and asked to make your guess. Together, DM1’s guess and DM2’s guess will determine the POINTS that DM1 earns.

Earning more points will increase your expected monetary payment at the end of the experiment. The specific way in which points become money will be explained later.

Description of the Task

In each decision situation, you (DM1) and your computer (DM2) each has a TARGET, LOWER LIMIT, and UPPER LIMIT. Your guess will have to be greater than or equal to your lower limit and less than or equal to your upper limit. DM2’s guess will always be greater than or equal to DM2’s lower limit and less than or equal to DM2’s upper limit.
In each decision situation, the targets, lower limits, and upper limits will be presented in a table like the following one:

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<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>100</td>
<td>500</td>
<td>0.7</td>
</tr>
<tr>
<td>DM2 (COMPUTER)</td>
<td>200</td>
<td>800</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Thus, you will be able to see both your target and limits as well as DM2’s target and limits.

Note that the targets and limits in the table above are only an example. All the numbers in the decision situation above were picked randomly and are for illustrative purposes only. In the 20 decision situations in the experiment, the targets and limits will be different and will change from one decision situation to the next. Thus, in each decision situation there will be new targets and limits for both DM1 and DM2.

**How Points are Earned**

The points you earn in a given decision situation will depend on your guess, DM2’s guess, and your target. Let’s say your guess is $G_{DM1}$, DM2’s guess is $G_{DM2}$, and your target is $T_{DM1}$ and DM2’s target is $T_{DM2}$. Let $D$ be the distance between $G_{DM1}$ (your guess) and $T_{DM1} \times G_{DM2}$ (your target times DM2’s guess).

You earn more points the smaller $D$ is, that is, the closer your guess is to your target times DM2’s guess. In particular, you will earn points that depend on $D$ in a way shown in the graph we have given you. The graph shows how many points you will earn for each value of $D$. (We will round points to the nearest integer.)

For example, if $G_{DM1}$ is exactly equal to $T_{DM1} \times G_{DM2}$, then $D = 0$ and you earn 300 points. If $D = 100$ so that $G_{DM1}$ is 100 away from $T_{DM1} \times G_{DM2}$, you earn 190 points. In general, you earn more points when $D$ is smaller, that is when $G_{DM1}$ is closer to $T_{DM1} \times G_{DM2}$; you earn the maximum points if $D = 0$, that is if $G_{DM1}$ is exactly equal to $T_{DM1} \times G_{DM2}$.

Are there any questions?

**Example**

To make sure you understand how your points are computed, let’s work through an example. All numbers in this example are picked randomly and are for illustrative
purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

Consider the following targets and limits:

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<tr>
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<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>200</td>
<td>800</td>
<td>0.9</td>
</tr>
<tr>
<td>DM2 (COMPUTER)</td>
<td>300</td>
<td>700</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Suppose you guess \( G_{DM1} = 700 \) and DM2 guesses \( G_{DM2} = 500 \).

Let us compute your points. The distance between \( G_{DM1} (700) \) and \( T_{DM1} \times G_{DM2} (0.9 \times 500 = 450) \) equals 250. Referring back to our graph, we see that you earn 75 points.

Are there any questions?

**Converting Points into Money**

At the end of the experiment, your points from each decision situation will be converted into money. For each decision situation, you can earn $0 or $1. The probability that you earn $1 will be larger the more points your earned.

In particular, let’s say you earned \( P \) points in a given decision situation. Imagine a roulette wheel that is divided into 300 equally large slices, \( P \) of which are black and \( 300 - P \) of which are white. The computer will “spin” such a roulette wheel. If the outcome is in the black area, you earn $1. Otherwise, you earn $0. For example, if \( P = 300 \) (the most attainable points in a decision situation), all slices are black and you earn $1 for sure. If \( P = 150 \), half the slices are black and you earn $1 with a 50-percent chance.

For each of the 20 decision situations, the computer will “spin” the roulette wheel separately and independently. Your monetary earnings for Part I will equal the sum of your monetary earnings from each of the 20 decision situations. For example, if you earned $1 for 18 decision situations and $0 for 8 decision situations, your earnings for Part I will equal $18.

**Final Remarks**

You have 5 minutes for each of the first 3 decision situations, 3 minutes for each of the following 2 decision situations, and 2 minutes for each of the remaining 15
decision situations. For the first few decision situations, the computer will not let you enter your guess immediately. You may have to wait 1 or 2 minutes before entering a guess so that you have time to think about your decision.

Within these time constraints, you can proceed from one decision situation to the next at your own pace. Once you make your guess in a decision situation, you cannot go back to change it. If you finish all 20 decision situations before other participants, you will have to wait for others to finish before the experiment can proceed on to Part II. Therefore, there is no benefit to racing through the decision situations. Instead, you should take your time and think about your decisions carefully.

We will provide you with a calculator. We will also distribute pens and scratch paper. You are free to use these materials if you find them helpful in any way. We will collect these materials at the end of Part I, but you can have them back at the end of the experiment if you wish.

We now provide a summary of Part I.

**Summary of Part I**

In each decision situation,

- you are DM1,
- DM2 is your computer,
- DM1 (you) and DM2 (your computer) have targets and limits,
- DM2 makes a guess between DM2’s limits,
- then you make a guess between your limits.

Let $D$ be the distance between your guess and your target times DM2’s guess. The number of points you earn depends on $D$ as shown in the graph. You earn more points the smaller $D$ is.

There will be 20 decision situations which have different targets and limits for DM1 and DM2.
Understanding Test for Part I

Welcome to the Understanding Test! All numbers in this understanding test are picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

All of the questions in the test refer to the following decision situation:

<table>
<thead>
<tr>
<th></th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>200</td>
<td>700</td>
<td>1.2</td>
</tr>
<tr>
<td>DM2 (COMPUTER)</td>
<td>300</td>
<td>800</td>
<td>0.8</td>
</tr>
</tbody>
</table>

QUESTIONS:

1. If DM2 guesses 750, what guess would earn you the most points?__________
   How many points would you earn by entering that guess?__________

2. If DM2 guesses 400, what guess would earn you the most points?__________
   How many points would you earn by entering that guess?__________

3. If DM2 guesses 430, what guess would earn you the most points?__________

4. If DM2 guesses 620, what guess would earn you the most points?__________

5. If you guess 212 and DM2 guesses 510, how many points do you earn?__________

6. If you guess 596 and DM2 guesses 580, how many points do you earn?__________
Instructions: Part II

Description of the Task

In Part II of the experiment, you will face the same 20 decision situations from Part I. They will appear in the same order as before. Recall that in Part I you were DM1 while your computer was DM2. Let $G_{DM1}$ be the guess you made in a given decision situation in Part I.

For each decision situation you are shown in Part II, your task will be to pick a number $X$ that is as close as possible to $G_{DM1}$, that is, as close as possible to the guess you made in that decision situation in Part I. Let $D$ now be the distance between $X$ and $G_{DM1}$. You earn more points the smaller $D$ is, that is the closer $X$ is to $G_{DM1}$. You maximize your points by entering $X$ equal to $G_{DM1}$. The exact number of points you earn will again be determined according to the graph, where $D$ now stands for the distance between $X$ and $G_{DM1}$. An example should help clarify matters. All the numbers in the example below were picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should pick your numbers in the actual experiment.

Example

Let’s say you faced the following situation in Part I:

<table>
<thead>
<tr>
<th></th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>100</td>
<td>500</td>
<td>0.6</td>
</tr>
<tr>
<td>DM2 (COMPUTER)</td>
<td>200</td>
<td>800</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Suppose that your guess in Part I was $G_{DM1} = 280$. Suppose also that in Part II you entered $X = 480$. Then, $D$ equals the distance between 280 and 480, which is 200. Referring to the graph, you earn points 80. If instead in Part II you entered $X = 180$, then $D = 100$ and you earn 190 points.

Are there any questions?
Final Remarks

To convert the points you earn in Part II into money, we use the same procedure as in Part I. For each decision situation in Part II, you can earn $0 or $2. The probability that you earn $2 will be larger the more points you earned.

You have 3 minutes for each of the first 5 decision situations and 2 minutes for each of the 15 remaining decision situations. For the first few decision situations, the computer will not let you enter your number immediately. You may have to wait 1 minute before entering a number so that you have time to think about your decision.

Within these time constraints, you can proceed from one decision situation to the next at your own pace. Once you pick your number in a decision situation, you cannot go back to change it. If you finish all 20 decision situations before other participants, you will have to wait for others to finish before you are dismissed. Therefore, there is no benefit to racing through the decision situations. Instead, you should take your time and think about your decisions carefully.

Summary of Part II

You will be shown the same 20 decision situations from Part I in the same order as before. For each decision situation,

- you were in the role of DM1,
- you made a guess $G_{DM1}$, and
- you will now pick a number $X$, which will be used to calculate $D$, where $D$ is the distance between $X$ and $G_{DM1}$.

The number of points you earn in each decision situation depends on $D$ as shown in the graph. You earn more points the smaller $D$ is.
Understanding Test for Part II

Welcome to the Understanding Test! All numbers in this understanding test are picked randomly and are for illustrative purposes only. They are not meant to suggest in any way how you should make your guesses in the actual experiment.

Suppose you guessed $G_{\text{DM1}} = 340$ when you faced the following example decision situation in Part I:

<table>
<thead>
<tr>
<th></th>
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<th>Upper Limit</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM1 (YOU)</td>
<td>100</td>
<td>700</td>
<td>1.2</td>
</tr>
<tr>
<td>DM2 (COMPUTER)</td>
<td>400</td>
<td>800</td>
<td>0.6</td>
</tr>
</tbody>
</table>

QUESTIONS:

1. What number $X$ in Part II would give you the most points?________
   How many points would you earn for picking this number?________

2. Suppose that in Part II you enter $X = 640$.
   How many points would you earn for picking this number?________

3. Suppose that in Part II you enter $X = 540$.
   How many points would you earn for picking this number?________

4. Suppose that in Part II you enter $X = 240$.
   How many points would you earn for picking this number?________
How Points Are Awarded for Given Values of D

Points

Value of D