Online Appendix A
Experimental Instructions

Overview and Consent

You are being asked to take part in an experimental study being done by researchers at ASU and Harvard University. The purpose of this research is to better understand how individuals evaluate their own performance and make choices about what tasks to pursue. Your participation will be composed of two 30-minutes sessions one week apart.

As a participant, you will make decisions, receive information, and complete tasks on your own computer. Each session has several parts. Your responses will be confidential and any identifying information will not be posted online and only the research team and the ASU Institutional Review Board (IRB) will have access to it. The results of this study may be used in reports, presentations, or publications but your name will not be used. All results will be shared only in aggregate form.

Your participation is completely voluntary. You can agree to take part and later change your mind. Your decision will not be held against you. **You must be a current undergraduate ASU student who is 18 years of age or older to participate in the study.** Your participation will help us understand the decision-making of college students. There are no foreseeable risks or discomforts to your participation.

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team at ProfZafar@asu.edu or 480-965-5745.

If you have any questions concerning the research study, please contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. The IRB Protocol ID for the study is STUDY00010684.

Compensation:

You will receive $12.5 for completing both sessions. You may earn additional compensation based upon your performance and decisions in the two sessions. The additional compensation can range from $0 to $49.5, depending on your performance. All the compensation you earn will be paid only after you complete the second session. All payments will be made via Amazon gift cards.

Please complete each of the two sessions only once. If, by accident, you participate more than once please let us know immediately and note that only your first participation will be considered for payment.

By clicking "Accept", you acknowledge that you have read the information stated and consent to participate in this study.

Accept

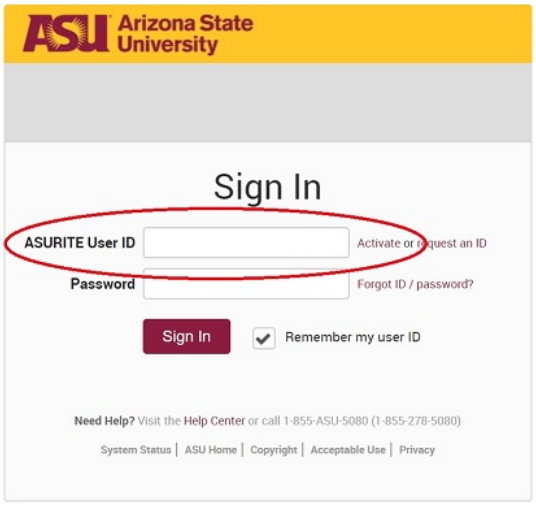
ASU Email Address

Please provide your **ASURITE** email address. We will use the same email address to contact you to participate in the follow-up survey one week from today and to send any payments.

See below for where to find your ASURITE. Your ASURITE User ID is the username you use to login into MyASU. The email must be of the form **ASURITE@asu.edu**.

Please enter your ASURITE email address:

Next



Study Overview

Thank you for choosing to participate. From this point forward, we ask you to be focused on the tasks of the study. Please do not close your browser window until you have completed the first session. If you close your browser you will not be able to re-enter.

In this study, you will be completing two rounds of problem-solving. The first round of problem-solving will be completed today. The second round of problem-solving will be completed during Session 2, approximately 1 week from today. Each round of problem-solving consists of two multiple-choice tests: one **Verbal** test and one **Math** test.

You will receive $12.5 for completing both sessions. In addition, you may earn additional compensation based upon your performance and decisions in the two sessions. The additional compensation can range from $0 to $49.5, depending on your performance. There are two ways in which you will earn additional compensation:

1. Performance on problem-solving rounds

At the end of your participation in Session 2, one of the two rounds of problem-solving will be selected to determine part of your payment. You will earn compensation according to your performance on that round of problem-solving. Your compensation may also depend on choices you make about how you wish to be compensated for that round of problem-solving. These choices will be explained to you in detail.

2. Providing accurate guesses about your performance

You will be asked a series of questions about your performance on the first round of problem-solving. In each of these questions, you have a chance to earn additional money by providing more accurate guesses about your performance. After the end of your participation in Session 2, one of these questions will be selected at random as the "decision-that-counts". We will pay you up to $1 based upon your answer in the decision-that-counts. These decisions will be explained to you in detail.

The participation fee and any additional compensation you may earn will be sent to you via an Amazon card within two days of completing Session 2.

Now, it is time to start the study. Click "Next" to proceed to the first round of problem-solving.

Next

Round 1 of Problem-Solving

In this round of problem-solving, you will complete two tests: one **Verbal** test and one **Math** test. Each test has 12 problems. You may skip any problems you do not wish to answer. Questions will appear one at a time, and you will have 30 seconds per question to respond. The order in which you complete the tests will be determined randomly by the computer.

If this round of problem-solving is chosen to determine your payment, you will receive $1 per problem solved correctly on one of the two tests, chosen at random. The computer will flip a coin: if the coin is heads, you will be paid $1 per problem solved correctly on the **Verbal** test. If the coin is tails, you will be paid $1 per problem solved correctly on the **Math** test. This money will be paid to you after your completion of Session 2. Since you will not know which test may be chosen for payment till the end of the study, you should treat each test as if you will be paid for it.

Click "Next" if you are ready to proceed to the first test.

Next

The subject participants see first is randomized!

There is a hard and easy version of each quiz. This document shows the hard version. Easy version can be share upon request.

Verbal Sample Questions

You are about to complete the **Verbal** test. On this page we show you two sample questions in order to familiarize yourself with the type of questions you will face during the actual test.

1. Select the answer choice with the two words that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

Physical exercise often has a _____ effect, releasing emotional tension and refreshing the spirit.

- ○ cathartic - purging
- ○ pejorative - fading
- ○ memorable - tenacious
- ○ indelible - constant

2. Determine whether the underlined portion of the sentence below is correct or whether it needs to be revised.

Inside the glove compartment were legal documents, pictures, and there were a few napkins from the coffee shop, but no gloves.

- ○ and there were a few napkins from the coffee shop, but no gloves.
- ○ and napkins from the coffee shop, no gloves were there.
- ○ and napkins from the coffee shop, but no gloves.
- ○ and napkins from the coffee shop, there were no gloves.

Click "Next" when you are ready to proceed to the **Verbal** test. Remember you will answer a total of 12 questions and that you will be given 30 seconds to answer each question.

Next

Verbal: Question 1 out of 12

Time left to complete this page: **0:29**

Choose the set of words that best completes the following sentence.

Favoring economy of expression in writing, the professor urged students toward a (i) _____ rather than an (ii) _____ prose style.

- (i) spare - (ii) ornate
- (i) terse - (ii) opinionated
- (i) personal - (ii) academic
- (i) repetitive - (ii) intricate

Next

Verbal: Question 2 out of 12

Time left to complete this page: **0:30**

Determine whether the underlined portion of the sentence below is correct or whether it needs to be revised.

High school reunions are usually looked forward to by alumni that have worked hard since graduation and now considered themselves successful.

- High school reunions are usually looked forward to by alumni who have worked hard since graduation and now consider themselves successful.
- Alumni who have worked hard since graduation and now consider themselves successful usually look forward to high school reunions.
- Alumnus that have worked hard since graduation and now consider themselves successful usually look forward to high school reunions.
- High school reunions are usually looked forward to by alumni that have worked hard since graduation and now consider yourselves successful.

Next

Verbal: Question 3 out of 12

Time left to complete this page: **0:30**

Select the answer choice with the two words that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

Perhaps the policy prohibiting background checks was to blame for the fact that the police force, usually staffed by men of high moral values, had been infiltrated by so many _____ .

- ○ enigmas - rogues
- ○ gentries - vassals
- ○ reprobates - bromides
- ○ swindler - liege

Next

Verbal: Question 4 out of 12

Time left to complete this page: **0:29**

Select the answer choice with the two words that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

Wanda was already lacking in decisiveness; the last thing she needed was a boss who would perpetually _____ in a time of crisis.

- ○ cower - indemnify
- ○ gesticulate - recoil
- ○ vacillate - waver
- ○ quiver - defer

Next

Verbal: Question 5 out of 12

Time left to complete this page: **0:29**

Choose the word that best completes the following sentence.

The employee was never the most efficient worker, but his many years of unwavering _____ to the firm made him one of the most trusted advisers even to the chief executive.

- ○ servitude
- ○ penury
- ○ drudgery
- ○ fidelity

Next

Verbal: Question 6 out of 12

Time left to complete this page: **0:29**

Please select the answer that best replaces the underlined portion of the text below.

In similarity with some other great works, the enduring horror tale Frankenstein was first published anonymously; its author, Mary Shelley, wrote the novel when she was not quite nineteen years old.

- ○ As
- ○ Like what happened with
- ○ Like the case with
- ○ Like

Next

Verbal: Question 7 out of 12

Time left to complete this page: **0:29**

Choose the word that best completes the following sentence.

The politician's speech to the crowd was composed of nothing but_____, a bitter railing against the party's opponents.

- ○ digressions
- ○ diatribes
- ○ platitudes
- ○ machinations

Next

Verbal: Question 8 out of 12

Time left to complete this page: **0:30**

Select the answer choice with the two words that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

His tendency toward egoism was reinforced by his decision to only associate with those who would _____ him.

- ○ coddle -impugn
- ○ excoriate - ostracize
- ○ aggrandize - lionize
- ○ abrade - contravene

Next

Verbal: Question 9 out of 12

Time left to complete this page: **0:30**

Please select the answer that best replaces the underlined portion of the text below.

The old maxim "Let the buyer beware" suggests that as a buyer we are responsible for inspecting merchandise for flaws before paying for it.

- ○ as a buyer it is their responsibility
- ○ the buyer is the responsible one
- ○ buyers are responsible
- ○ buyers are to be the ones responsible

Next

Verbal: Question 10 out of 12

Time left to complete this page: **0:29**

Select the answer choice with the two words that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

The dictator won most of his followers through _____ since little hard evidence lay on his side.

- ○ his bonhomie - torpor
- ○ demagoguery - sophistry
- ○ browbeating - idolatry
- ○ languor - casuistry

Next

Verbal: Question 11 out of 12

Time left to complete this page: **0:29**

Please select the answer that best replaces the underlined portion of the text below.

New Zealand's Kaikoura Peninsula, a ruggedly beautiful spit of land, borders an undersea canyon that is home to the sperm whale and the giant squid.

- ○ borders an undersea canyon that is
- ○ bordering an undersea canyon,
- ○ and it borders an undersea canyon, which is
- ○ is the border of an undersea canyon, being

Next

Verbal: Question 12 out of 12

Time left to complete this page: **0:29**

Select the answer choice with the two words that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

The _____ the lawyers displayed in court lay in stark contrast to the affable attitude they displayed towards one another in every other setting.

- ○ creed - cordial manner
- ○ geniality - dearth
- ○ antagonism - enmity
- ○ lawlessness - alienation

Next

Verbal section is over!

Please click "Next" to start the **Math** section.

Next

Math Sample Questions

You are about to complete the **Math** test. On this page we show you two sample questions in order to familiarize yourself with the type of questions you will face during the actual test.

1. A train travelling at a speed of 45 mph enters a tunnel that is 0.5 miles long. The length of the train is 0.25 miles. How long does it take for all of the train to pass through the tunnel, from the moment the front enters, to the moment the rear emerges?

- ○ 1 minute and 30 seconds
- ○ 1 minute
- ○ 45 seconds
- ○ 30 seconds

2. After walking 50 feet to the south of her house, Juanita turned left and walked 20 feet. What is the direction of her house from where she is now?

- ○ North-West
- ○ North
- ○ West
- ○ South-West

Click "Next" when you are ready to proceed to the **Math** test. Remember you will answer a total of 12 questions and that you will be given 30 seconds to answer each question.

Next

Math: Question 1 out of 12

Time left to complete this page: **0:29**

Three people go to a restaurant. Their bill comes to $78. They decide to split the cost. One person plays $4.50; the next person pays 3 times that amount. How much will the third person have to pay?

- ○ $60
- ○ $70.50
- ○ $66
- ○ $77.50

Next

Math: Question 2 out of 12

Time left to complete this page: **0:30**

A large city is hiring painters to create murals around the city. Each painter can paint 2 large murals a day or 6 small murals a day. If the city needs 24 large murals and 96 small murals painted in a 2-day time period, how many painters will be needed?

- ○ 19
- ○ 8
- ○ 27
- ○ 14

Next

Math: Question 3 out of 12

Time left to complete this page: **0:30**

The average of three numbers is 15. The average of two of those numbers is 20. What is the third number?

- ○ 5
- ○ 10
- ○ 11
- ○ 12

Next

Math: Question 4 out of 12

Time left to complete this page: **0:29**

How many minutes before noon is it if 72 minutes ago it was twice as many minutes past 9 am?

- ○ 30
- ○ 36
- ○ 42
- ○ 48

Next

Math: Question 5 out of 12

Time left to complete this page: **0:30**

What number does not belong to the following set?
{7426, 6183, 3248, 2573}

- ○ 7426
- ○ 6183
- ○ 3248
- ○ 2573

Next

Math: Question 6 out of 12

Time left to complete this page: **0:29**

What are the next two numbers in the sequence below? 10, 11, 9, 12, 8, 13, 7, 14, **?**, **?**.

- ○ 6, 15
- ○ 6, 17
- ○ 15, 6
- ○ 17, 6

Next

Math: Question 7 out of 12

Time left to complete this page: **0:29**

Jack is three times as old as Jill, but in three years he will only be twice as old. How old is Jack?

- ○ 9
- ○ 12
- ○ 6
- ○ 3

Next

Math: Question 8 out of 12

Time left to complete this page: **0:30**

After walking 5 feet north of the house, John turned left and walked 50 feet. He then turned left and walked another 5 feet. How far is he away from the house?

- ○ 50 feet
- ○ 55 feet
- ○ 60 feet
- ○ 5 feet

Next

Math: Question 9 out of 12

Time left to complete this page: **0:30**

I have collected 21 apples, which I wish to put into bags for handing out to some of my neighbors. All bags must contain the same number of apples and I wish to use as few bags as possible. How many neighbors received a bag of apples?

- ○ 3
- ○ 7
- ○ 5
- ○ 11

Next

Math: Question 10 out of 12

Time left to complete this page: **0:29**

You have 10 cards numbered from 1 to 10. What are the chances of drawing out the cards numbered 8, 10 and 9 in that order?

- ○ 1/3
- ○ 1/720
- ○ 121/360
- ○ 1/1000

Next

Math: Question 11 out of 12

Time left to complete this page: **0:29**

Which number replaces the ? in this sequence? 17, 51, **?**, 459, 1377.

- ○ 127
- ○ 153
- ○ 289
- ○ 347

Next

Math: Question 12 out of 12

Time left to complete this page: **0:30**

In 7 years the combined age of my sister and her three children will be 92. What is the combined age now?

- ○ 64
- ○ 85
- ○ 71
- ○ 80

Next

Beliefs about Round 1 Performance

This completes the first round of problem-solving. Next, we would like to ask you about how you think you did on each test in **Round 1**. You will answer a series of questions in this part of the experiment. One of these answers could be randomly selected as the "decision-that-counts" to determine your additional compensation.

For every question in this part of the experiment, you have an incentive to give us your best, honest guess of how you think you performed.

In some of these questions we will ask about your performance on the tests relative to the **"reference group."** This is a group of 9 participants who have already completed the same tests that you just completed. These participants are very similar to you – a group of ASU students. We will create an ordering of the 10 of you for each test in terms of the scores on the respective test, from highest (ranked first) to lowest (ranked last). If your score is tied with someone in the **reference group**, the computer will flip a coin to break the tie.

First, we are going to ask you about your performance on the **Verbal** test.

Next

Beliefs about Round 1 Performance: Verbal

Please provide a guess of how many problems out of 12 you solved correctly on the **Verbal** test. If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Verbal

You just told us that you believe you had a score of 3 on the **Verbal** test. What do you think the chances are that you had exactly that score? If this is your decision-that-counts, you can earn an additional $1 based upon your answer. You have an incentive to tell us your best, honest guess (click here to learn more about your incentives).

Move the slider below to indicate how you'd fill in the following: "I believe I have a ___% chance of having exactly a score of 3 on the **Verbal** test."

0

Next

Beliefs about Round 1 Performance: Verbal

Now we are curious how you think your **Verbal** performance compares to the performance of the **reference group** (that is, the 9 ASU students who also completed the **Verbal** test).

If we compared your **Verbal** test score to the scores of the **reference group**, how do you think you would rank? If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Verbal

The purpose of this question is to ask you about the chance that you rank in each of the following positions when your performance on the **Verbal** test is compared to the **reference group** (that is, the 9 ASU students who also completed the **Verbal** test). If this is your "decision-that-counts", you can earn an additional $1 based upon your answer. You have an incentive to tell us your best, honest guess (click here to learn more about your incentives).

What do you think the chances are that you rank in each of the following positions relative to the **reference group**? The sum of the probabilities should add up to 100.

Ranking	Probability
First: better than all other 9 participants	
Second: worse than 1, better than 8 other participants	
Third: worse than 2, better than 7 other participants	
Fourth: worse than 3, better than 6 other participants	
Fifth: worse than 4, better than 5 other participants	
Sixth: worse than 5, better than 4 other participants	
Seventh: worse than 6, better than 3 other participants	
Eighth: worse than 7, better than 2 other participants	
Ninth: worse than 8, better than 1 other participant	
Last: worse than all other 9 participants	
Total:	**0**

Your current answers imply that you think you have a **0%** probability of being in the top-4 when your performance in the **Verbal** test is compared to the **reference group**.

Next

Beliefs about Round 1 Performance: Math

Now we will ask you about your beliefs about how you performed on the **Math** test.

Please provide a guess of how many problems out of 12 you solved correctly on the **Math** test. If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Math

You just told us that you believe you had a score of 4 on the **Math** test. What do you think the chances are that you had exactly that score? If this is your decision-that-counts, you can earn an additional $1 based upon your answer. You have an incentive to tell us your best, honest guess (click here to learn more about your incentives).

Move the slider below to indicate how you'd fill in the following: "I believe I have a ___% chance of having exactly a score of 4 on the **Math** test."

0

Next

Beliefs about Round 1 Performance: Math

Now we are curious how you think your **Math** performance compares to the performance of the **reference group** (that is, the 9 ASU students who also completed the **Math** test).

If we compared your **Math** test score to the scores of the **reference group**, how do you think you would rank? If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Math

The purpose of this question is to ask you about the chance that you rank in each of the following positions when your performance on the **Math** test is compared to the **reference group** (that is, the 9 ASU students who also completed the **Math** test). If this is your "decision-that-counts", you can earn an additional $1 based upon your answer. You have an incentive to tell us your best, honest guess (click here to learn more about your incentives).

What do you think the chances are that you rank in each of the following positions relative to the **reference group**? The sum of the probabilities should add up to 100.

Ranking	Probability
First: better than all other 9 participants	
Second: worse than 1, better than 8 other participants	
Third: worse than 2, better than 7 other participants	
Fourth: worse than 3, better than 6 other participants	
Fifth: worse than 4, better than 5 other participants	
Sixth: worse than 5, better than 4 other participants	
Seventh: worse than 6, better than 3 other participants	
Eighth: worse than 7, better than 2 other participants	
Ninth: worse than 8, better than 1 other participant	
Last: worse than all other 9 participants	
Total:	**0**

Your current answers imply that you think you have a **0%** probability of being in the top-4 when your performance in the **Math** test is compared to the **reference group**.

Next

Choice about Round 2 Payment

In approximately one week from today, you will complete Session 2 of this experiment. In that session, you will complete a second round of problem-solving which consists of a second **Verbal** test and a second **Math** test. Again, each test will consist of 12 problems. You will complete the two tests in a randomly-determined order.

In **Round 2**, the test problems will be harder on average than the problems in **Round 1**.

You have a choice in terms of how you will be paid for **Round 2** if it is chosen for payment. Of all the decisions you make in this experiment about how to be paid for **Round 2** performance, exactly one of them will be randomly chosen to determine how you are paid if **Round 2** is chosen for payment.

Please click "Next" to start making your choices.

Next

Choice about Round 2 Payment

Please click on the option that you would like to choose for **Round 2**.

First Option	Second Option
Earn $1 per problem solved correctly on the **Math** test in **Round 2**.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.

Next

Choice about Round 2 Payment

Each row below represents a decision between two payment options for **Round 2**. Your job is to tell us, within each row, which payment option you prefer for **Round 2**. Simply click on the payment option that you like better. **Please make a choice for each row**, as each decision is equally likely to be chosen as the decision-that-counts. We will use the choice you make in the decision-that-counts to determine how you will be paid for **Round 2**.

Some of the options involve comparing your **Round 2** performance on the **Math** test to the **Round 2** performance of the **reference group** (that is, the 9 ASU students who also completed the **Round 2** **Math** test that you will complete). In some of the options below, you receive additional compensation if you place within the top-4 compared to **reference group** in terms of **Round 2** performance on the **Math** test.

Before making your choices you must answer correctly the following questions and click "Submit." You won't be able to make your choices until both answers are correct.

Understanding Questions:

1. What would be your payment if you pick the first option in row 1 and you are not in the top-4 performers on the **Math** test in **Round 2**?

2. What would be your payment if you pick the second option in the last row and you are in the top-4 performers on the **Verbal** test in **Round 2**?

Submit

First Option	Second Option
Earn $4 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $3.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $3 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $2.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $2 per problem solved correctly on the **Math** test in **Round 2** test if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $1.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.

Next

Choice about Round 2 Payment

As before, each row below represents a decision between two payment options for **Round 2**. Your job is to tell us, within each row, which payment option you prefer for **Round 2**. Simply click on the payment option that you like better within each row. **Please make a choice for each row**, as each decision is equally likely to be chosen as the decision-that-counts. We will use the choice you make in the decision-that-counts to determine how you will be paid for **Round 2**.

The difference from the previous page is that now some of the options involve comparing your **Round 2** performance on the **Verbal** test (opposed to the **Math** test) to the **Round 2** performance of the **reference group** (that is, the 9 ASU students who also completed the **Round 2** **Verbal** test that you will complete). In some of the options below, you receive additional compensation if you place within the top-4 compared to **reference group** in terms of **Round 2** performance on the **Verbal** test.

Before making your choices you must answer correctly the following questions and click "Submit." You won't be able to make your choices until both answers are correct.

Understanding Questions:

1. What would be your payment if you pick the first option in the first row and you are not in the top-4 performers on the **Verbal** test in **Round 2**?

2. What would be your payment if you pick the second option in the last row and you are in the top-4 performers on the **Verbal** test in **Round 2**?

Submit

First Option	Second Option
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $1.5 per problem solved correctly on the **Verbal** test in **Round 2** if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $2 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $2.50 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $3 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $3.5 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $4 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.

Next

Groups F1 and F2 receive feedback, control group does not.

Feedback Section

In this section we are going to provide some feedback about your performance in **Round 1** of Problem-Solving.

Next

Feedback

In this page we provide some feedback on how you performed in **Round 1** on the **Math** test. We have randomly chosen one participant from the **reference group** and we will now tell you whether you performed BETTER or WORSE than that participant on the **Math** test in **Round 1**.

You performed WORSE than the randomly-chosen participant.

About what test are you receiving feedback in this page?

How did you perform relative to the random participant?

Next

Feedback

In this page we provide some feedback on how you performed in **Round 1** on the **Verbal** test. We have randomly chosen one participant from the **reference group** and we will now tell you whether you performed BETTER or WORSE than that participant on the **Verbal** test in **Round 1**.

You performed WORSE than the randomly-chosen participant.

About what test are you receiving feedback in this page?

How did you perform relative to the random participant?

Next

Only for F2 group, beliefs and choices immediately after feedback!

Beliefs about Round 1 Performance

Now that you have received some feedback on your performance, we are going to give you another chance to answer some questions about how you think you did on each test in **Round 1**. In this part of the experiment, we would like to ask you, one more time, about how you think you did on each test in **Round 1**. You will answer a series of questions in this part of the experiment. One of these answers could be randomly selected as the "decision-that-counts" to determine your additional compensation.

For every question in this part of the experiment, you have an incentive to give us your best, honest guess of how you think you performed.

First, we are going to ask you about your performance on the **Verbal** test.

Next

Beliefs about Round 1 Performance: Verbal

Please provide a guess of how many problems out of 12 you solved correctly on the **Verbal** test. If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Verbal

You just told us that you believe you had a score of 4 on the **Verbal** test. What do you think the chances are that you had exactly that score? If this is your decision-that-counts, you can earn an additional $1 based upon your answer. You have an incentive to tell us your best, honest guess (click here to learn more about your incentives).

Move the slider below to indicate how you'd fill in the following: "I believe I have a ___% chance of having exactly a score of 4 on the **Verbal** test."

0

Next

Beliefs about Round 1 Performance: Verbal

Now we are curious how you think your **Verbal** performance compares to the performance of the **reference group** (that is, the 9 ASU students who also completed the **Verbal** test).

If we compared your **Verbal** test score to the scores of the **reference group**, how do you think you would rank? If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Verbal

The purpose of this question is to ask you about the chance that you rank in each of the following positions when your performance on the **Verbal** test is compared to the **reference group** (that is, the 9 ASU students who also completed the **Verbal** test). If this is your "decision-that-counts", you can earn an additional $1 based upon your answer. You have an incentive to tell us your best, honest guess (click here to learn more about your incentives).

What do you think the chances are that you rank in each of the following positions relative to the **reference group**? The sum of the probabilities should add up to 100.

Ranking	Probability
First: better than all other 9 participants	
Second: worse than 1, better than 8 other participants	
Third: worse than 2, better than 7 other participants	
Fourth: worse than 3, better than 6 other participants	
Fifth: worse than 4, better than 5 other participants	
Sixth: worse than 5, better than 4 other participants	
Seventh: worse than 6, better than 3 other participants	
Eighth: worse than 7, better than 2 other participants	
Ninth: worse than 8, better than 1 other participant	
Last: worse than all other 9 participants	
Total:	**0**

Your current answers imply that you think you have a **0%** probability of being in the top-4 when your performance in the **Verbal** test is compared to the **reference group**.

Next

Beliefs about Round 1 Performance: Math

Now we will ask you about your beliefs about how you performed on the **Math** test.

Please provide a guess of how many problems out of 12 you solved correctly on the **Math** test. If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Math

You just told us that you believe you had a score of 5 on the **Math** test. What do you think the chances are that you had exactly that score? If this is your decision-that-counts, you can earn an additional $1 based upon your answer. You have an incentive to tell us your best, honest guess (click here to learn more about your incentives).

Move the slider below to indicate how you'd fill in the following: "I believe I have a ___% chance of having exactly a score of 5 on the **Math** test."

0

Next

Beliefs about Round 1 Performance: Math

Now we are curious how you think your **Math** performance compares to the performance of the **reference group** (that is, the 9 ASU students who also completed the **Math** test).

If we compared your **Math** test score to the scores of the **reference group**, how do you think you would rank? If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Math

The purpose of this question is to ask you about the chance that you rank in each of the following positions when your performance on the **Math** test is compared to the **reference group** (that is, the 9 ASU students who also completed the **Math** test). If this is your "decision-that-counts", you can earn an additional $1 based upon your answer. You have an incentive to tell us your best, honest guess (click here to learn more about your incentives).

What do you think the chances are that you rank in each of the following positions relative to the **reference group**? The sum of the probabilities should add up to 100.

Ranking	Probability
First: better than all other 9 participants	
Second: worse than 1, better than 8 other participants	
Third: worse than 2, better than 7 other participants	
Fourth: worse than 3, better than 6 other participants	
Fifth: worse than 4, better than 5 other participants	
Sixth: worse than 5, better than 4 other participants	
Seventh: worse than 6, better than 3 other participants	
Eighth: worse than 7, better than 2 other participants	
Ninth: worse than 8, better than 1 other participant	
Last: worse than all other 9 participants	
Total:	**0**

Your current answers imply that you think you have a **0%** probability of being in the top-4 when your performance in the **Math** test is compared to the **reference group**.

Next

Choice about Round 2 Payment

Now that you have received some feedback on your performance, we are going to give you another chance to answer some questions about how you would like to be compensated for **Round 2** of the experiment. In approximately one week from today, you will complete Session 2 of this experiment. In that session, you will complete a second round of problem-solving which consists of a second **Verbal** test and a second **Math** test. Again, each test will consist of 12 problems. You will complete the two tests in a randomly-determined order.

In **Round 2**, the test problems will be harder on average than the problems in **Round 1**.

You have a choice in terms of how you will be paid for **Round 2** if it is chosen for payment. Of all the decisions you make in this experiment about how to be paid for **Round 2** performance, exactly one of them will be randomly chosen to determine how you are paid if **Round 2** is chosen for payment.

Please click "Next" to start making your choices.

Next

Choice about Round 2 Payment

Please click on the option that you would like to choose for **Round 2**.

First Option	Second Option
Earn $1 per problem solved correctly on the **Math** test in **Round 2**.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.

Next

Choice about Round 2 Payment

Each row below represents a decision between two payment options for **Round 2**. Your job is to tell us, within each row, which payment option you prefer for **Round 2**. Simply click on the payment option that you like better. **Please make a choice for each row**, as each decision is equally likely to be chosen as the decision-that-counts. We will use the choice you make in the decision-that-counts to determine how you will be paid for **Round 2**.

Some of the options involve comparing your **Round 2** performance on the **Math** test to the **Round 2** performance of the **reference group** (that is, the 9 ASU students who also completed the **Round 2** **Math** test that you will complete). In some of the options below, you receive additional compensation if you place within the top-4 compared to **reference group** in terms of **Round 2** performance on the **Math** test.

First Option	Second Option
Earn $4 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $3.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $3 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $2.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $2 per problem solved correctly on the **Math** test in **Round 2** test if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $1.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.

Next

Choice about Round 2 Payment

As before, each row below represents a decision between two payment options for **Round 2**. Your job is to tell us, within each row, which payment option you prefer for **Round 2**. Simply click on the payment option that you like better. **Please make a choice for each row**, as each decision is equally likely to be chosen as the decision-that-counts. We will use the choice you make in the decision-that-counts to determine how you will be paid for **Round 2**.

The difference from the previous page is that now some of the options involve comparing your **Round 2** performance on the **Verbal** test (opposed to the **Math** test) to the **Round 2** performance of the **reference group** (that is, the 9 ASU students who also completed the **Round 2** **Verbal** test that you will complete). In some of the options below, you receive additional compensation if you place within the top-4 compared to **reference group** in terms of **Round 2** performance on the **Verbal** test.

First Option	Second Option
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $1.5 per problem solved correctly on the **Verbal** test in **Round 2** if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $2 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $2.50 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $3 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $3.5 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $4 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.

Next

Survey

We are nearing the end of the experiment, and will conclude with a few demographic questions.

1. What is your gender?

- ○ Male
- ○ Female

2. What is your race/ethnicity? Please select all that apply.

- ☐ White/Caucasian
- ☐ Black/African American
- ☐ American Indian
- ☐ Hispanic/Latino
- ☐ Asian/Pacific Islander
- ☐ Prefer not to answer
- ☐ Other (Please specify below.)

3. What is the highest level of education your mother has completed?

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4. What is the highest level of education your father has completed?

----

5. Which category best represents the total annual income of your parents?

----

6. Did you attend high school in the United States?

- ○ Yes
- ○ No

7. What were your scores on the SAT 1? Please skip these questions if you did not take the SAT.

What was your SAT verbal score?

What was your SAT math score?

8. What was your composite score on the ACT? (Round up your score to the nearest integer. Please skip this question if you did not take the ACT.):

9. To the best of your knowledge, what was your relative ranking in your high school graduation class? Where 1-10 means you ranked in the top 10%.

- 1-10
- 11-20
- 21-30
- 31-40
- 41-50
- 51-60
- 61-70
- 71-80
- 81-90
- +90

10. What school year are you in at ASU?

- Freshman
- Sophomore
- Junior
- Senior

11. What field do you plan to major in?

----

12. What is your cumulative grade point average (GPA)? Please round up to the nearest tenth.

13. Are you a Barrett Honors College student?

- ○ Yes
- ○ No

14. Have you already graduated from ASU?

- ○ Yes
- ○ No

15. Where are you currently taking this experiment from?

----

16. On a scale from 1 to 7, how would you rate your willingness to take risks in daily activities?

Not at all willing to take risks						**Fully ready to take risks**
○ 1	○ 2	○ 3	○ 4	○ 5	○ 6	○ 7

Next

Congratulations you finished the first session!

Thank you so much for your time! **Remember there is a second session of this study in approximately one week.** You will earn $12.5 plus a chance of earning additional compensation that ranges between $0- $49.5 by completing the second session.

Your participation in this study is very valuable in understanding the decision-making of ASU students. If you have any questions, please email the research team at ProfZafar@asu.edu.

In about a week you will receive an email from Prof. Basit Zafar with the access link for the second session of the experiment.

You may now close this window!

Session 2

Study Overview

Welcome to Session 2! Thank you for returning to participate today. From this point forward, we ask you to be focused on the tasks of the study.

The study consists two rounds of problem-solving. You solved the first round of problems last week. The second round of problem-solving will be completed today. Each round consists of two multiple-choice tests: one **Verbal** test and one **Math** test.

You will receive a participation fee of $12.5 for your participation in this study today. In addition, you may earn additional compensation based upon your performance and decisions in the two sessions. The additional compensation can range from $0 to $49.5, depending on your performance. There are two ways in which you will earn additional compensation:

1. Performance on problem-solving rounds

At the end of today's session, one of the two rounds of problem-solving will be selected to determine part of your payment. You will earn compensation according to your performance on that round of problem-solving. Your compensation may also depend on choices you make about how you wish to be compensated for that round of problem-solving. These choices will be explained to you in detail.

2. Providing accurate guesses about your performance

You will be asked a series of questions about your performance on the first round of problem-solving last week. In each of these questions, you have a chance to earn additional money by providing more accurate guesses about your performance. After the end of today's session, one of the questions that you will answered today or answered last week will be selected at random as the "decision-that-counts". We will pay you up to $1 based upon your answer in the decision-that-counts. These decisions will be explained to you in detail.

The participation fee for today's session and any additional compensation you may have earned will be sent to you via an Amazon card within two days of completing Session 2.

Now, it is time to start the study. Please click "Next" to proceed to Session 2.

Next

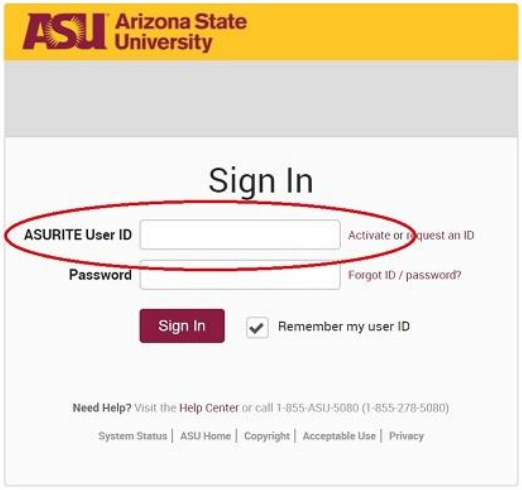
ASU Email Address

In order to link your answers from today with your answers from last week, please enter the ASURITE email address that you provided last week and click "Next".

See below for where to find your ASURITE. Your ASURITE User ID is the username you use to login into MyASU. The email must be of the form **ASURITE@asu.edu**.

ASURITE email address:

Next



Session 2

In the first section of Session 2, we want to ask you a few questions about your performance during **Round 1** of Session 1, last week. Recall that in **Round 1** of Session 1 you took two multiple-choice tests: one **Verbal** and one **Math**, with 12 questions each. We are interested in how you think you performed on those tests. Please answer the following questions.

Next

Beliefs about Round 1 Performance

In this part of the experiment, we would like to ask you about how you think you did on each test that you took in **Round 1** last week. You will answer a series of questions in this part of the experiment. One of these questions could be randomly selected as the "decision-that-counts" to determine your additional compensation.

For every question in this part of the experiment, you have an incentive to give us your best, honest guess of how you think you performed.

In some of these questions we will ask about your performance on the tests relative to the **"reference group."** This is a group of 9 participants who completed the same tests that you completed last week. These participants are very similar to you – a group of ASU students. We created an ordering of the 10 of you for each test in terms of the scores on the respective test, from highest (ranked first) to lowest (ranked last). If your score tied with someone in the **reference group**, the computer flipped a coin to break the tie.

First, we are going to ask you about your performance on the **Verbal** test.

Next

Beliefs about Round 1 Performance: Verbal

Please provide a guess of how many problems out of 12 you think you solved correctly on the **Verbal** test in Session 1, last week. If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Verbal

You just told us that you believe you had a score of 7 on the **Verbal** test. What do you think the chances are that you had exactly that score? If this is your decision-that-counts, you can earn an additional $1 based upon your answer. You have an incentive to tell us the truth (click here to learn more about your incentives).

Move the slider below to indicate how you'd fill in the following: "I believe I have a ___% chance of having exactly a score of 7 on the **Verbal** test."

0

Next

Beliefs about Round 1 Performance: Verbal

Now we are curious how you think your **Verbal** performance in Session 1 compared to the performance of the **reference group** (that is, the 9 ASU students who also completed the **Verbal** test).

If we compare your **Verbal** test score to the scores of the **reference group**, how do you think you would rank? If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Verbal

The purpose of this question is to ask you about the chance that you rank in each of the following positions when your performance on the **Verbal** test is compared to the **reference group** (that is, the 9 ASU students who also completed the **Verbal** test). If this is your decision-that-counts, you can earn an additional $1 based upon your answer. You have an incentive to tell us the truth (click here to learn more about your incentives).

What do you think the chances are that you rank in each of the following positions relative to the **reference group**? The sum of the probabilities should add up to 100.

Ranking	Probability
First: better than all other 9 participants	
Second: worse than 1, better than 8 other participants	
Third: worse than 2, better than 7 other participants	
Fourth: worse than 3, better than 6 other participants	
Fifth: worse than 4, better than 5 other participants	
Sixth: worse than 5, better than 4 other participants	
Seventh: worse than 6, better than 3 other participants	
Eighth: worse than 7, better than 2 other participants	
Ninth: worse than 8, better than 1 other participant	
Last: worse than all other 9 participants	
Total:	**0**

Your current answers imply that you think you have a **0%** probability of being in the top-4 when your performance in the **Verbal** test is compared to the **reference group**.

Next

Beliefs about Round 1 Performance: Math

Now we will ask you about your beliefs about how you performed on the **Math** test.

Please provide a guess of how many problems out of 12 you think you solved correctly on the **Math** test, last week. If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Math

You just told us that you believe you had a score of 4 on the **Math** test. What do you think the chances are that you had exactly that score? If this is your decision-that-counts, you can earn an additional $1 based upon your answer. You have an incentive to tell us the truth (click here to learn more about your incentives).

Move the slider below to indicate how you'd fill in the following: "I believe I have a ___% chance of having exactly a score of 4 on the **Math** test."

0

Next

Beliefs about Round 1 Performance: Math

Now we are curious how you think your **Math** performance in Session 1 compared to the performance of the **reference group** (that is, the 9 ASU students who also completed the **Math** test).

If we compare your **Math** test score to the scores of the **reference group**, how do you think you would rank? If this is your decision-that-counts and your answer to this question is correct, you will earn $1 in additional payment.

Next

Beliefs about Round 1 Performance: Math

The purpose of this question is to ask you about the chance that you rank in each of the following positions when your performance on the **Math** test is compared to the **reference group** (that is, the 9 ASU students who also completed the **Math** test). If this is your decision-that-counts, you can earn an additional $1 based upon your answer. You have an incentive to tell us the truth (click here to learn more about your incentives).

What do you think the chances are that you rank in each of the following positions relative to the **reference group**? The sum of the probabilities should add up to 100.

Ranking	Probability
First: better than all other 9 participants	
Second: worse than 1, better than 8 other participants	
Third: worse than 2, better than 7 other participants	
Fourth: worse than 3, better than 6 other participants	
Fifth: worse than 4, better than 5 other participants	
Sixth: worse than 5, better than 4 other participants	
Seventh: worse than 6, better than 3 other participants	
Eighth: worse than 7, better than 2 other participants	
Ninth: worse than 8, better than 1 other participant	
Last: worse than all other 9 participants	
Total:	**0**

Your current answers imply that you think you have a **0%** probability of being in the top-4 when your performance in the **Math** test is compared to the **reference group**.

Next

Choice about Round 2 Payment

You are about to complete your **Round 2** tests. Recall that during Session 1 you made some decisions about how you would like to be compensated if **Round 2** is selected to determine your pay. Now, we are going to give you another chance to answer some questions about how you would like to be compensated for **Round 2** of the experiment. In just a few minutes, you will complete a second round of problem-solving which consists of a second **Verbal** test and a second **Math** test. Again, each test will consist of 12 problems. You will complete the two tests in a randomly-determined order.

In **Round 2**, the test problems will be harder on average than the problems in **Round 1**.

You have a choice in terms of how you will be paid for **Round 2** if it is chosen for payment. Of all the decisions you make in this experiment about how to be paid for **Round 2** performance, exactly one of them will be randomly chosen to determine how you are paid if **Round 2** is chosen for payment.

Please click "Next" to start making your choices.

Next

Choice about Round 2 Payment

Please click on the option that you would like to choose for **Round 2**.

First Option	Second Option
Earn $1 per problem solved correctly on the **Math** test in **Round 2**.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.

Next

Choice about Round 2 Payment

Each row below represents a decision between two payment options for **Round 2**. Your job is to tell us, within each row, which payment option you prefer for **Round 2**. Simply click on the payment option that you like better. **Please make a choice for each row**, as each decision is equally likely to be chosen as the decision-that-counts. We will use the choice you make in the decision-that-counts to determine how you will be paid for **Round 2**.

Some of the options involve comparing your **Round 2** performance on the **Verbal** test to the **Round 2** performance of the **reference group** (that is, the 9 ASU students who also completed the **Round 2** **Verbal** test that you will complete). In some of the options below, you receive additional compensation if you place within the top-4 compared to **reference group** in terms of **Round 2** performance on the **Verbal** test.

Before making your choices you must answer correctly the following questions and click "Submit." You won't be able to make your choices until both answers are correct.

Understanding Questions:

1. What would be your payment if you pick the first option in the first row and you are not in the top-4 performers on the **Verbal** test in **Round 2**?

2. What would be your payment if you pick the second option in the last row and you are in the top-4 performers on the **Verbal** test in **Round 2**?

Submit

First Option	Second Option
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $1.5 per problem solved correctly on the **Verbal** test in **Round 2** if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $2 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $2.50 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $3 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $3.5 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.
$1 per problem solved correctly on the **Math** test in **Round 2**.	Earn $4 per problem solved correctly on the **Verbal** test in **Round 2** test if in top-4; $0 otherwise.

Next

Choice about Round 2 Payment

As before, each row below represents a decision between two payment options for **Round 2**. Your job is to tell us, within each row, which payment option you prefer for **Round 2**. Simply click on the payment option that you like better within each row. **Please make a choice for each row**, as each decision is equally likely to be chosen as the decision-that-counts. We will use the choice you make in the decision-that-counts to determine how you will be paid for **Round 2**.

The difference from the previous page is that now some of the options involve comparing your **Round 2** performance on the **Math** test (opposed to the **Verbal** test) to the **Round 2** performance of the **reference group** (that is, the 9 ASU students who also completed the **Round 2** **Math** test that you will complete). In some of the options below, you receive additional compensation if you place within the top-4 compared to **reference group** in terms of **Round 2** performance on the **Math** test.

Before making your choices you must answer correctly the following questions and click "Submit." You won't be able to make your choices until both answers are correct.

Understanding Questions:

1. What would be your payment if you pick the first option in row 1 and you are not in the top-4 performers on the **Math** test in **Round 2**?

2. What would be your payment if you pick the second option in the last row and you are in the top-4 performers on the **Verbal** test in **Round 2**?

Submit

First Option	Second Option
Earn $4 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $3.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $3 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $2.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $2 per problem solved correctly on the **Math** test in **Round 2** test if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.
Earn $1.50 per problem solved correctly on the **Math** test in **Round 2** if in top-4; $0 otherwise.	$1 per problem solved correctly on the **Verbal** test in **Round 2**.

Next

Round 2 of Problem-Solving

Thank you for making these decisions. It is now time to complete **Round 2**.

In this round of problem-solving, you will complete two tests: one **Verbal** test and one **Math** test. Each test has 12 problems. You may skip any problems you do not wish to answer. The order in which you complete the tests will be determined randomly by the computer.

If this round of problem-solving is chosen to determine your payment, we will use the randomly-selected choice about how you preferred to be compensated in order to determine your pay. You will be informed about the decision-that-counts at the end of the session. This money will be paid to you within two days of Session 2 completion. Since you will not know which test may be chosen for payment till the end of the study, you should treat each test as if you will be paid for it.

Click "Next" if you are ready to proceed to the first test.

Next

Verbal: Question 1 out of 12

Time left to complete this page: **0:28**

Determine whether the underlined portion of the sentence below is correct or whether it needs to be revised.

Despite smartphones and easy accessibility for social networks, almost half of the millennials - people reaching young adulthood in the 21st century - are feeling isolated and lonely.

- ○ Despite smartphones and easy accessibility for social networks
- ○ Despite them using smartphones and easily accessing social networks,
- ○ Despite their smartphones making access to social networks easy,
- ○ Although there is an increasing use of smartphones and easy accessibility for social networks,

Next

Verbal: Question 2 out of 12

Time left to complete this page: **0:29**

Please select the word that best complete the sentence below.

Oren missed the play's overarching significance, focusing instead on details so minor that they would best be described as _____.

- ○ indelible
- ○ moribund
- ○ picayune
- ○ impervious

Next

Verbal: Question 3 out of 12

Time left to complete this page: **0:29**

Determine whether the underlined portion of the sentence below is correct or whether it needs to be revised.

Thieves steal Hondas and Toyotas from the 1990s more than other models because they can chop them up and sell them for parts that are worth more than the car.

- ○ more than they steal other models because they can chop them up and sell them for parts that are worth more than the car
- ○ more than they do other models because they can dismantle the cars and sell the parts that are worth more than the car
- ○ more than other models because they can chop the cars up and sell them for parts that are worth more than the car
- ○ more than other models because they can dismantle them up and sell them for parts that are worth more than the car

Next

Verbal: Question 4 out of 12

Time left to complete this page: **0:29**

Determine whether the underlined portion of the sentence below is correct or whether it needs to be revised.

In the U.S., German luxury brands have succeeded in getting people who might have once thought the cars were out of their league in buying and leasing some snazzy rides.

- ○ have succeeded in getting people who might have once thought the cars were out of their league in buying and leasing some snazzy rides
- ○ have succeeded in getting people who might have once thought the cars were out of their league to buy and lease some snazzy rides
- ○ have succeeded in getting people who once might have thought the cars were out of their league to buy and lease some snazzy rides
- ○ has succeeded in getting people who might have once thought the cars were out of their league to buy and lease some snazzy rides

Next

Verbal: Question 5 out of 12

Time left to complete this page: **0:29**

Select the two answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

The future of the accord was uncertain as desires to mitigate constituents' frustrations with previous votes along party lines were balanced with seemingly _____ beliefs.

- ○ intractable - pertinacious
- ○ inerrant - ineffable
- ○ fickle - tenebrous
- ○ incurable - flighty

Next

Verbal: Question 6 out of 12

Time left to complete this page: **0:28**

Please select the word(s) that best complete the sentence below.

Because rap and hip-hop offer such _____ commentary on contemporary issues, they are often said to be sharp-edged musical genres.

- ○ nebulous
- ○ trenchant
- ○ circumspect
- ○ prosaic

Next

Verbal: Question 7 out of 12

Time left to complete this page: **0:27**

Choose the set of words that best completes the following sentence.

Analysts project that the pharmaceutical company's stock price will (i) _____ as the "promising" new drug's effects have turned out to be largely (ii) _____ but benign.

- ○ (i) dally - (ii) noisome
- ○ (i) wane - (ii) antiseptic
- ○ (i) promulgate - (ii) nugatory
- ○ (i) wane - (ii) noisome

Next

Verbal: Question 8 out of 12

Time left to complete this page: **0:28**

Please select the answer that best replaces the underlined portion of the text below.

Dime novels, known in nineteenth century England as "penny dreadfuls," flourished because increased mechanization of printing and increased literacy rates made production of large numbers of these books profitable.

- ○ and increased literacy rates made
- ○ with increased literacy rates also made
- ○ as well as increased literacy rates, making
- ○ and literacy rates increased, making

Next

Verbal: Question 9 out of 12

Time left to complete this page: **0:29**

Determine whether the underlined portion of the sentence below is correct or whether it needs to be revised.

Recently, hopes that the European Central Bank will reach a deal to help Spain and Italy borrow at cheaper rates has nudged financial markets higher.

- ○ Spain and Italy borrow at cheaper rates has nudged financial markets higher
- ○ Spain and Italy borrow at cheaper rates have nudged financial markets to higher levels
- ○ Spain and Italy borrow at cheaper rates has nudged financial markets to higher levels
- ○ Spain and Italy borrow at cheaper rates nudged financial markets to higher levels

Next

Verbal: Question 10 out of 12

Time left to complete this page: **0:29**

Please select the answer that best replaces the underlined portion of the text below.

Santa Fe is one of the oldest cities in the United States, its adobe architecture, spectacular setting, and clear, radiant light have long made it a magnet for artists.

- Santa Fe, which is one of the oldest cities in the United States, its
- Santa Fe, which is one of the oldest cities in the United States, has
- Santa Fe is one of the oldest cities in the United States; its
- Santa Fe, one of the oldest cities in the United States, and its

Next

Verbal: Question 11 out of 12

Time left to complete this page: **0:29**

Determine whether the underlined portion of the sentence below is correct or whether it needs to be revised.

Given that Agatha Christie wrote 66 novels and 14 short story collections, all of which are still in print in multiple formats and dozens of languages, skeptics would be well advised to admit defeat on the issue of whether or not she sold more books than any other novelist ever has.

- admit defeat on the issue of whether or not she sold more books than any other novelist ever has
- admit defeat on the issue of whether she sold more books than any other novelist ever has
- admit defeat on the issue of whether or not she sold more books than any other novelist ever has
- be defeated on the issue of whether she sold more books than every other novelist

Next

Verbal: Question 12 out of 12

Time left to complete this page: **0:29**

Please select the answer that best replaces the underlined portion of the text below.

The book is useful because it offers not just philosophy and theory but also tells you what and how to live every day.

- ○ but also tells you what and how to live every day
- ○ but also it gives ways of everyday living
- ○ but also advice for everyday living
- ○ but also it gives practical advice for everyday life

Next

Verbal section is over!

Please click "Next" to start the **Math** section.

Next

Math: Question 1 out of 12

Time left to complete this page: **0:28**

Sofia is driving to Texas. She travels at 70 kilometers per hour for 2 hours, and 50 kilometers per hour for 8 hours. Over the 10-hour time period what was Sofia's average speed?

- ○ 54 km/h
- ○ 55 km/h
- ○ 56 km/h
- ○ 57 km/h

Next

Math: Question 2 out of 12

Time left to complete this page: **0:29**

At the State Fair eating contest the winner ate an average of 5 hot dogs per minute during the first 5 minutes. After another 5 minutes the average increased to 10 hot dogs per minute. What was the average for the last 5 minutes?

- ○ 5
- ○ 10
- ○ 15
- ○ 20

Next

Math: Question 3 out of 12

Time left to complete this page: **0:30**

Starting at midnight, snow fell 1.5" every 6 hours. If there was already 2.25" of snow at midnight, what was the accumulation of the snow at 9 am?

- ○ 2.25"
- ○ 3.75"
- ○ 4.5"
- ○ 5.25"

Next

Math: Question 4 out of 12

Time left to complete this page: **0:28**

In a survey on the High Street on a Saturday afternoon, 5/16 of women questioned had bought just cosmetics, 5/8 had bought just clothing, while 115 women had just browsed and bought nothing. How many women had just bought cosmetics?

- ○ 575
- ○ 1150
- ○ 115
- ○ 35

Next

Math: Question 5 out of 12

Time left to complete this page: **0:30**

Three coins are tossed in the air at the same time. What are the chances that at least two of the coins will fall tails up?

- ○ 1/2
- ○ 1/27
- ○ 1/8
- ○ 3/8

Next

Math: Question 6 out of 12

Time left to complete this page: **0:29**

I completed a journey by bus, rail and taxi. If the train fare cost $27, the taxi fare cost $15 less than the train fare and the bus fare cost $6 less than the taxi fare, how much did the total journey cost me?

- ○ $45
- ○ $48
- ○ $41
- ○ $43

Next

Math: Question 7 out of 12

Time left to complete this page: **0:30**

I have three rolls of turf, each measuring 20 meters long by 4 meters wide, with which I intend to cover two rectangular areas of ground, one of which is 6 meters by 11 meters and the other 15.5 meters by 4 meters. How many square meters of turf will I have left over?

- ○ 128
- ○ 112
- ○ 240
- ○ 114

Next

Math: Question 8 out of 12

Time left to complete this page: **0:29**

At a recent election, a total of 964 votes were cast for the four candidates, the winner exceeding his opponents by 105, 213 and 346 votes respectively. How many votes were cast for the winner?

- ○ 407
- ○ 483
- ○ 525
- ○ 636

Next

Math: Question 9 out of 12

Time left to complete this page: **0:30**

You have accidentally left the plug out of the bath and are attempting to fill the bath with both taps full on. The hot tap takes 5 minutes to fill the bath and the cold tap 4 minutes, and the water empties through the plug-hole in 20 minutes. In how many minutes will the bath be filled?

- ○ 2 minutes
- ○ 2.5 minutes
- ○ 3 minutes
- ○ 3.5 minutes

Next

Math: Question 10 out of 12

Time left to complete this page: **0:29**

Tom, Dick and Harry wish to share out a certain sum of money between them. Tom gets 2/5, Dick gets 0.50 and Harry gets $21. How much is the original sum of money?

- ○ 200
- ○ 140
- ○ 210
- ○ 190

Next

Math: Question 11 out of 12

Time left to complete this page: **0:30**

Tins of carrots cost $1 more if bought individually than if bought in packs of 12. If a pack of 12 costs $24, what is the cost of 5 tins bought individually?

- ○ 12
- ○ 15
- ○ 10
- ○ 11

Next

Math: Question 12 out of 12

Time left to complete this page: **0:28**

A man drives to a town 30 miles away at a speed of 45 mph and arrives in 40 minutes. On his return he takes 60 minutes. What is his average speed for the total trip?

- ○ 30 mph
- ○ 36 mph
- ○ 40 mph
- ○ 45 mph

Next

Survey

We are nearing the end of the experiment, and will conclude with a few more questions.

1. In general, would you say that **Verbal** is a category that men or women know more about? Use the slider scale to indicate your answer, where -1 indicates a very large female advantage, and 1 indicates a very large male advantage.

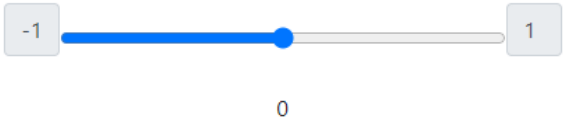
-1 1

0

Next

Survey

2. In general, would you say that **Math** is a category that men or women know more about? Use the slider scale to indicate your answer, where -1 indicates a very large female advantage, and 1 indicates a very large male advantage.



Next

For F1 and F2 that received feedback.

Survey

3. Last week we gave you feedback on how you performed in **Round 1** on the **Verbal** test relative to one randomly chosen participant from the **reference group**. We would now like to know if you remember the feedback you had received last week for the **Verbal** test. If you recall the feedback correctly, you will earn $0.25 in additional payment.

According to the feedback that you received last week, how did your performance on the **Verbal** test last week compare to that of the one randomly chosen participant?

- ○ My performance was **better** than that of the randomly chosen participant
- ○ My performance was **worse** than that of the randomly chosen participant
- ○ I do not recall

Next

Survey

4. Last week we gave you feedback on how you performed in **Round 1** on the **Math** test relative to one randomly chosen participant from the **reference group**. We would now like to know if you remember the feedback you had received last week for the **Math** test. If you recall the feedback correctly, you will earn $0.25 in additional payment.

According to the feedback that you received last week, how did your performance on the **Math** test last week compare to that of the one randomly chosen participant?

- ○ My performance was **better** than that of the randomly chosen participant
- ○ My performance was **worse** than that of the randomly chosen participant
- ○ I do not recall

Next

Congratulations the experiment has concluded!

The **Math** test in **Round 1** was randomly selected for payment. You got **6** correct answers. Therefore your payoff for this part is **$6.0**.

In order to determine your additional compensation, the computer randomly selected as the "decision-that-counts" your answer to the question related with your performance on the **Verbal** test in **Round 1** relative to the **reference group**. According to your answer to this question you earned **$0.0**.

You correctly recalled your feedback for both tests, therefore your earned **$0.5**

The fee for completing the study is **$12.5**. Therefore, your total compensation is **$19.0**. You will receive your compensation via an Amazon card within two days.

If you have any questions, please email the research team at ProfZafar@asu.edu.

Thank you so much for your time! You may close this window now.