Each of the following problems presents a choice between two options. Each problem is presented with a scale ranging from 1 (representing one option) through 6 (representing the other option). For each item, please circle the number on the scale that best reflects your relative preference between the two options.

## Problem 1

Imagine that recent evidence has shown that a pesticide is threatening the lives of 1,200 endangered animals. Two response options have been suggested:

If Option A is used, 600 animals will be saved for sure.

If Option B is used, there is a 75% chance that 800 animals will be saved, and a 25% chance that no animals will be saved.

Which option do you recommend to use?

1	2	3	4	5	6	
Definitely we	ould			Def	initely wou	ıld
choose A					choose B	

#### Problem 2

Because of changes in tax laws, you may get back as much as \$1200 in income tax. Your accountant has been exploring alternative ways to take advantage of this situation. He has developed two plans:

If Plan A is adopted, you will get back \$400 of the possible \$1200.

If Plan B is adopted, you have a 33% chance of getting back all \$1200, and a 67% chance of getting back no money.

Which plan would you use?

2	3	4	5	6	
ould			Def	initely w	ould
L				choose B	3
	2 ould	2 3 ould	2 3 4 ould	2 3 4 5 ould Def	2 3 4 5 6 ould Definitely w choose E

Imagine that in one particular state it is projected that 1000 students will drop out of school during the next year. Two programs have been proposed to address this problem, but only one can be implemented. Based on other states' experiences with the programs, estimates of the outcomes that can be expected from each program can be made. Assume for purposes of this decision that these estimates of the outcomes are accurate and are as follows:

If Program A is adopted, 400 of the 1000 students will stay in school.

If Program B is adopted, there is a 40% chance that all 1000 students will stay in school and 60% chance that none of the 1000 students will stay in school.

Which program would you favor for implementation?

1	2	3	4	5	6	
Definitely we	ould			Def	initely wou	ıld
choose A					choose B	

## Problem 4

Imagine that the U.S. is preparing for the outbreak of an unusual disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:

If Program A is adopted, 200 people will be saved.

If Program B is adopted, there is a 33% chance that 600 people will be saved, and a 67% chance that no people will be saved.

Which program do you recommend to use?

1	2	3	4	5	6	
Definitely wo	ould			Def	initely wo	ould
choose A					choose B	

Imagine that your doctor tells you that you have a cancer that must be treated. Your choices are as follows:

Surgery: Of 100 people having surgery, 90 live through the operation, and 34 are alive at the end of five years.

Radiation therapy: Of 100 people having radiation therapy, all live through the treatment, and 22 are alive at the end of five years.

Which treatment would you choose?

	1	2	3	4	5	6	
Defini	tely would	d			I	Definitely wo	ould
choos	se surgery				(	choose radia	tion

## Problem 6

Imagine that your client has \$6,000 invested in the stock market. A downturn in the economy is occurring. You have two investment strategies that you can recommend under the existing circumstances to preserve your client's capital.

If strategy A is followed, \$2,000 of your client's investment will be saved.

If strategy B is followed, there is a 33% chance that the entire \$6,000 will be saved, and a 67% chance that none of the principal will be saved.

Which of these two strategies would you favor?

1	2	3	4	5	6	
Definitely wo	ould			Def	initely wo	ould
choose A					choose B	

#### Problem 7

Imagine a hospital is treating 32 injured soldiers, who are all expected to lose one leg. There are two doctors that can help the soldiers, but only one can be hired:

If Doctor A is hired, 20 soldiers will keep both legs.

If Doctor B is hired, there is a 63% chance that all soldiers keep both legs and a 37% chance that nobody will save both legs.

Which doctor do you recommend?

1	2	3	4	5	6	
Definitely we	ould			Def	initely wo	ould
choose A					choose B	

Each of the following problems ask you to rate your judgment of a product or a situation. Each problem is presented with a scale ranging from 1 (representing the worst rating) through 6 (representing the best rating). For each problem, please circle the number on the scale that best reflects your judgment.

## Problem 1

Imagine that a type of condom has a 95% success rate. That is, if you have sex with someone who has the AIDS virus, there is a 95% chance that this type of condom will prevent you from being exposed to the AIDS virus.

Should the government allow this type of condom to be advertised as "an effective method for lowering the risk of AIDS?"

123456Definitely noDefinitely yes

#### Problem 2

Imagine the following situation. You are entertaining a special friend by inviting them for dinner. You are making your favorite lasagna dish with ground beef. Your roommate goes to the grocery store and purchases a package of ground beef for you. The label says 80% lean ground beef.

What's your evaluation of the quality of this ground beef?

123456Very lowVery high

#### Problem 3

In a recent confidential survey completed by graduating seniors, 35% of those completing the survey stated that they had never cheated during their college career.

Considering the results of the survey, how would you rate the incidence of cheating at your university?

1	2	3	4	5	6
Very low					Very high

As R&D manager, one of your project teams has come to you requesting an additional \$100,000 in funds for a project you instituted several months ago. The project is already behind schedule and over budget, but the team still believes it can be successfully completed. You currently have \$500,000 remaining in your budget unallocated, but which must carry you for the rest of the fiscal year. Lowering the balance by an additional \$100,000 might jeopardize flexibility to respond to other opportunities.

Evaluating the situation, you believe there is a fair chance the project will not succeed, in which case the additional funding would be lost; if successful, however, the money would be well spent. You also noticed that of the projects undertaken by this team, 30 of the last 50 have been successful.

What is the likelihood you would fund the request?

1	2	3	4	5	6
Very unlikely					Very likely

### Problem 5

Suppose a student got 90% correct in the mid-term exam and 70% correct in the final-term exam, what would be your evaluations of this student's performance?

123456Very poorVery good

#### **Problem 6**

Imagine that a woman parked illegally. After talking to her, you believe that there is a 20% chance that she did not know she parked illegally.

With this in mind, how much of a fine do you believe this woman deserves?

123456Minimum fineMaximum fine

#### Problem 7

Imagine that a new technique has been developed to treat a particular kind of cancer. This technique has a 50% chance of success, and is available at the local hospital.

A member of your immediate family is a patient at the local hospital with this kind of cancer. Would you encourage him or her to undergo treatment using this technique?

## The following problems ask whether it is sometimes OK to do different things. For each question, please indicate whether *in your opinion* the answer is yes or no.

- 1. Do you think it is sometimes OK ... ... to steal under certain circumstances?
  - Yes No
- 2. Do you think it is sometimes OK ... ... to smoke cigarettes?

Yes No

3. Do you think it is sometimes OK ... ... to commit a crime which could put you in jail?

Yes No

4. Do you think it is sometimes OK ... ... to keep things you find in the street?

Yes

No

No

No

5. Do you think it is sometimes OK ... ... to experiment with marijuana?

Yes

6. Do you think it is sometimes OK ... ... to use your fists to resolve a conflict?

Yes

7. Do you think it is sometimes OK ... ... to drink and drive?

Yes No

8. Do you think it is sometimes OK ... ... to yell and argue to solve a conflict?

Yes No

9. Do you think it is sometimes OK ... ... not to hold the door open for people?

Yes No

10. Do you think it is sometimes OK ... ... not to tell the police when you witness a crime?

Yes No

11. Do you think it is sometimes OK ... ... not to give directions to someone who is lost?

Yes No

12. Do you think it is sometimes OK ... ... not to be on time for appointments?

Yes No

13. Do you think it is sometimes OK ... ... not to return something you borrowed?

Yes

No

14. Do you think it is sometimes OK ... ... not to keep secrets that a friend told you?

Yes No

15. Do you think it is sometimes OK ... ... not to return phone calls right away?

Yes No

16. Do you think it is sometimes OK ... ... not to spend time with friends in need?

Yes No

This survey presents true/false questions about various aspects of everyday life. Please indicate, for each statement, whether you believe it to be true or false, by circling the "true" or "false". You may think that some items do not have a clear-cut answer. For those items, please try to give the answer that would be true in general, or in most cases.

Please read through the following examples to find out more about this survey.

Example 1:

## Pittsburgh's hockey team is the Bruins.

We want you to do two things:

First, answer the question. In this example, you might think "No, it's the Penguins. So the statement is FALSE." Then you would circle 'False'.

## **Pittsburgh's hockey team is the Bruins.** This statement is [ True( False].

Second, think about how sure you are of your answer. Give a number from 50% to 100%. In other words, what is the percent chance that you are right? Circle one of the numbers on the scale.

50%	60%	70%	80%	90%	100%
just guessing					absolutely sure

If your answer is a total guess, circle 50%. This means that there is a 50% chance that you are right, and a 50% chance that you are wrong. If you are absolutely sure, circle 100%. If you aren't sure, then circle a number in between, to show how sure you are.

In this example, you might think "I'm absolutely sure it's false, so 100%." So you would circle 100%.

## Pittsburgh's hockey team is the Bruins.

50%	60%	70%	80%	90%	(100%)
just guessing					absolutely sure

absolutely sure

Please read the examples below. They show answers given by other people. Read them closely, and make sure you understand their answers.

## Example 2:

Thanksgiving Day is on the fourth Thursday of November.

• Yes, I think that's when Thanksgiving is. I would say TRUE.

• I'm pretty sure, but it might be on the third Thursday of November, so 80%.

#### Your answer would look like this: Thanksgiving Day is on the fourth Thursday of November. This statement is (True / False].

just guessing

		-				
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
Example Amman • I really • I'm gut	<u>e 3:</u> <b>is the capital of</b> <i>v don't know, so 1</i> <i>essing, so 50%</i> .	t <b>Jordan.</b> I'll just tak	xe a guess. I'll	say, uh, TR	UE.	
Your and <b>Amman</b> This stat	swer would look a <b>is the capital of</b> tement is True /	like this: [ <b>Jordan.</b> False].				
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
Example The Hu • Oh yes • I'm alm Your and The Hu This stat	<u>e 4:</u> dson River does it does! I think is nost positive that swer would look dson River does tement is [ True (	<b>n't run pa</b> it's one of 's false, so like this: <b>p't run pa</b> False].	ast New York ( the rivers. So to 1'll say 90%. Ast New York (	C <b>ity.</b> that's FALS C <b>ity.</b>	SE.	
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
Example Bill Clir • That's • I think	<u>e 5:</u> <b>1ton doesn't hav</b> right, he doesn't. that's right, but 1	e a beard TRUE. I'm not su	• re, he might ha	ve grown oi	ne. I'll say 7	70%.
Your and <b>Bill Clir</b> This stat	swer would look <b>ton doesn't hav</b> tement is True /	like this: <b>e a beard</b> False].	•			
	50%	60%	(70%)	80%	90%	100%

If	•	<b>7011</b>	have	anv	questions.	please	ask now.
			marc	will y	questions,	preube	

For each of the following statements, circle true or false to indicate your answer. Then circle a number on the scale to indicate how sure you are of your answer. The scale ranges from 50% (meaning that you were just guessing) to 100% (meaning that you were absolutely sure).

## 1. Many smokers use the nicotine in cigarettes to treat depression.

	50% just guessing	60%	70%	80%	90%	100% absolutely sure
2. Stres	s makes it easier	r to form k	oad habits.			
This stat	ement is [True / ]	False ].				
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
3. You damp to	can take wrinkle wel.	es out of y	our clothes by	y putting the	em in the d	lryer with a
This stat	ement is [True / ]	False ].				
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>4.</b> After This stat	<b>a fight with you</b> ement is [True / ]	<b>ir partner</b> False ].	, you should	not focus on	who was t	o blame.
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
5. Ther	e is no way to in	iprove you	ır memory.			
This stat	ement is [True / ]	False ].				
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
6. The g pay inte	grace period on great on outstand	your credi ling paym	it card is the a ents.	amount of ti	me you do	not have to
This stat	ement is [True / ]	False J.				
	50% just guessing	60%	70%	80%	90%	100% absolutely sure

## 7. Red wine stains are easier to remove than beer stains.

	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>8. Muscl</b> This state	es do not burn ment is [True / ]	<b>calories w</b> False ].	hen you are a	at rest.		
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>9. Alcoh</b> This state	ol causes dehyd ment is [True / ]	<b>lration.</b> False ].				
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>10. Prob</b> This state	lems with in-la ment is [True / ]	<b>ws contril</b> False ].	oute to more t	than 30% of	divorces.	
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>11. Hom</b> This state	osexual couples ment is [True / ]	<b>s are not l</b> e False ].	egally allowed	d to adopt.		
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>12. A pr</b> of This state	omotion means ment is [True / ]	<b>that you</b> False ].	will get a mor	e satisfying	job.	
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>13. IRS</b> for this state	forms are avail ment is [True / ]	<b>able on-li</b> False ].	ne.			
	50% just guessing	60%	70%	80%	90%	100% absolutely sure

## 14. Procrastination is worse when you work in a cluttered environment.

	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>15.</b> A ve This state	enture capital fu ement is [True / ]	<b>nd inves</b> False ].	ts in new busi	nesses by pro	oviding sta	artup capital.
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>16. It is</b> <b>lawyer.</b> This state	wise to handle a	<b>all negoti</b> False 1.	ations yoursel	f, even if you	r opponer	nt uses a
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>17. Car</b> This state	<b>bohydrates are</b> benent is [True / ]	<b>fattening</b> False ].	g no matter ho	w much you	eat of ther	n.
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>18. You</b> This state	<b>ng people face f</b> ement is [True / ]	<b>ew stere</b> False ].	otypes when lo	ooking for a j	ob.	
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>19. It ca</b> This state	an be instructive ement is [True / ]	e <b>for chil</b> e False ].	dren to see the	ir parents re	solve a fig	;ht.
	50% just guessing	60%	70%	80%	90%	100% absolutely sure
<b>20. The</b> This state	re are nonprofit ement is [True / ]	: <b>organiz</b> False ].	ations that hel	p people witl	h debt cou	inseling.
	50% just guessing	60%	70%	80%	90%	100% absolutely sure

## 21. Assertive behavior makes your brain experience an increase in pleasure.

This statement is [True / False ].

50%	60%	70%	80%	90%	100%
just guessing					absolutely sure

## 22. Credit card companies can offer lower payments if you can come up with a lump sum settlement.

This statement is [True / False ].

50%	60%	70%	80%	90%	100%
just guessing					absolutely sure

## 23. Contracting a sexually transmitted disease is not an automatic sign that your partner has had an affair.

This statement is [True / False ].

50%	60%	70%	80%	90%	100%
just guessing					absolutely sure

## 24. Some sexually transmitted diseases can cause infertility.

This statement is [True / False ].

50%	60%	70%	80%	90%	100%
just guessing					absolutely sure

# 25. Self-employed people pay the same amount of taxes as people who work for an employer.

This statement is [True / False ].

50%	60%	70%	80%	90%	100%
just guessing					absolutely sure

# 26. When buying a new home, there is little need to have it inspected before you buy it.

This statement is [True / False ].

50%	60%	70%	80%	90%	100%
just guessing					absolutely sure

## 27. Creating a routine is an important step in getting unpleasant work done.

50%	60%	70%	80%	90%	100%
just guessing					absolutely sure

<b>28.</b> Once you have experienced an event, your memory of it can not be changed. This statement is [True / False ].									
	50% just guessing	60%	70%	80%	90%	100% absolutely sure			
<b>29. Med</b> This state	<b>29. Meditation slows the heart rate.</b> This statement is [True / False ].								
	50% just guessing	60%	70%	80%	90%	100% absolutely sure			
30. If yo	u get into an au Is	ito accido	ent, let the othe	er person ta	ke the lead	in handling			
This state	ement is [True / ]	False ].							
	50% just guessing	60%	70%	80%	90%	100% absolutely sure			
<b>31. Then</b> This state	<b>31.</b> There is no way you can negotiate a lower rate with a credit card company. This statement is [True / False ].								
	50% just guessing	60%	70%	80%	90%	100% absolutely sure			
<b>32. Obe</b> This state	sity increases yo ement is [True / ]	o <b>ur risk (</b> False ].	of type 2 diabet	tes.					
	50% just guessing	60%	70%	80%	90%	100% absolutely sure			
<b>33. Talk</b> This state	<b>33. Talking about sex helps romantic relationships.</b> This statement is [True / False ].								
	50% just guessing	60%	70%	80%	90%	100% absolutely sure			
<b>34. Hare</b> This state	<b>34. Hard evidence is lacking that acupuncture helps you to quit smoking.</b> This statement is [True / False ].								
	50% just guessing	60%	70%	80%	90%	100% absolutely sure			

## <u>Instructions:</u> Please read the practice problems on this page carefully before going on to the problems on the next page.

Imagine Chris is going to buy a DVD player with the \$369 he received for his birthday. He wants to find out how the DVD players that are available for that price compare to each other. A magazine rated DVD players on each of five features as follows, where higher is better:

	Very Low	Low	Medium	High	Very	
Hıgh	1	2	3	4	5	

For example, two DVD players and their ratings are listed in the table below:

				Features		
	]	Picture	Sound	Programming	Reliability of	Price
		Quality	Quality	Options	Brand	
DVD	Α	2	2	5	4	\$369
	В	2	3	3	3	\$369

## The following examples use the table above. Please read each carefully.

Example 1. Chris selects the DVD player with the highest rating in Programming Options.

Which <u>one</u> of the presented DVD player would Chris prefer? <u>A</u>

Example 2. Chris only wants a DVD player with a sound quality that is rated higher than 4.

Which <u>one</u> of the presented DVD player would Chris prefer? <u>none</u>

Example 3. Chris only wants the best in Picture Quality.

Which **<u>two</u>** of the presented DVD players would Chris prefer? <u>A</u>, and <u>B</u>

The following questions are about other people choosing between DVD players, like the ones above. **Please read each question carefully, because they ask for different answers.** For each question, think about how each person makes their choice, then pick the DVD they choose. But be careful, because the DVD players will change from question to question.

Very Low	Low	Medium	High	Very High	
1	2	3	4	5	

				Features		
		Picture	Sound	Programming	Reliability of	Price
		Quality	Quality	Options	Brand	
DVD	А	5	4	2	1	\$369
	В	5	5	3	3	\$369
	С	5	2	4	4	\$369
	D	1	5	5	3	\$369
	E	4	5	1	1	\$369

## Question 1:

Brian selects the DVD player with the highest number of ratings greater than "Medium" Which **one** of the presented DVD players would Brian prefer?

			Features		
	Picture	Sound	Programming	Reliability of	Price
	Quality	Quality	Options	Brand	
А	2	5	5	5	\$369
В	5	4	4	5	\$369
С	5	3	2	5	\$369
D	3	5	2	2	\$369
Е	4	4	4	5	\$369
	A B C D E	Picture QualityA2B5C5D3E4	Picture QualitySound QualityA25B54C53D35E44	FeaturesPicture QualitySound QualityProgramming OptionsA255B544C532D352E444	FeaturesPicture QualitySound QualityProgramming OptionsReliability of BrandA255B5445C5325D3522E4445

## **Question 2:**

Sally first selects the DVD players with the best Sound Quality. From the selected DVD players, she then selects the best on Picture Quality. Then, if there is still more than one left to choose from, she selects the one best on Programming Options.

Which one of the presented DVD players would Sally prefer?

Very Low	Low	Medium	High	Very High	
1	2	3	4	5	

**Question 3:** 

-				Features		
		Picture	Sound	Programming	Reliability of	Price
		Quality	Quality	Options	Brand	
DVD	А	3	1	2	5	\$369
	В	5	5	3	2	\$369
	С	4	3	3	3	\$369
	D	5	5	5	4	\$369
	Е	2	5	4	4	\$369

Pat doesn't want to read through the entire table. He decides to read the table row by row until he finds the very first DVD player that has no ratings below "Medium." He will just choose that DVD player.

Which <u>one</u> of the presented DVD players would Pat prefer? \_\_\_\_\_

## **Question 4:**

C				Features		
		Picture	Sound	Programming	Reliability of	Price
		Quality	Quality	Options	Brand	
DVD	Α	3	5	5	1	\$369
	В	1	2	1	2	\$369
	С	5	5	4	4	\$369
	D	5	3	4	2	\$369
	Е	4	5	2	2	\$369

LaToya only wants a DVD player that got a "Very High" rating on Reliability of Brand.

Which **one** of the presented DVD players LaToya prefer?

Very Low	Low	Medium	High	Very High	
1	2	3	4	5	

**Question 5:** 

				Features		
		Picture	Sound	Programming	Reliability of	Price
		Quality	Quality	Options	Brand	
DVD	А	5	5	5	3	\$369
	В	3	5	4	5	\$369
	С	5	2	2	4	\$369
	D	5	1	2	5	\$369
	E	4	2	4	5	\$369

From the DVD players with the best available Picture Quality, Tricia selects the DVD players with the lowest number of ratings below "Medium." If there is more than one DVD player left to choose from, she then picks the one that has the best rating on "Reliability of Brand."

Which one of the presented DVD players would Tricia prefer?

## **Question 6:**

L				Features		
		Picture Quality	Sound Quality	Programming Options	Reliability of Brand	Price
DVD	Α	3	1	5	2	\$369
	В	1	2	1	2	\$369
	С	5	4	3	1	\$369
	D	4	2	3	3	\$369
	Е	4	4	2	4	\$369

Lisa wants the DVD player with the highest average rating across features.

Which **one** of the presented DVD players would Lisa prefer?

Very Low	Low	Medium	High	Very High	
1	2	3	4	5	

**Question 7:** 

_			Features		
	Picture	Sound	Programming	Reliability of	Price
	Quality	Quality	Options	Brand	
А	5	3	5	5	\$369
В	2	5	4	1	\$369
С	4	5	2	3	\$369
D	3	5	3	1	\$369
E	3	5	3	4	\$369
	A B C D E	Picture QualityA5B2C4D3E3	Picture QualitySound QualityA5B2C4D3E3	PeaturesPicture QualitySound QualityProgramming OptionsA535B254C452D353E353	FeaturesPicture QualitySound QualityProgramming OptionsReliability of BrandA535B2541C4523D3531E3534

Andy wants the DVD player with the highest average rating he can get while still making sure to keep the best rating on Sound Quality.

Which one of the presented DVD players would Andy prefer?

## **Question 8:**

-		Features							
		Picture	Sound	Programming	Reliability of	Price			
		Quanty	Quanty	Options	Brand	<b>#2</b> < 0			
DVD	A	5	4	5	3	\$369			
	В	5	4	1	2	\$369			
	С	3	3	5	5	\$369			
	D	5	5	1	2	\$369			
	Е	3	5	1	3	\$369			

Shane wants no DVD players that score below "Medium" on Picture Quality, no DVD players that score below "Medium" on Sound Quality, and no DVD players that score "Very Low" on any other feature.

Which **two** of the presented DVD players would Shane prefer? \_\_\_\_\_ and \_\_\_\_\_

Very Low	Low	Medium	High	Very High	
1	2	3	4	5	

**Question 9:** 

	_			Features		
		Picture	Sound	Programming	Reliability of	Price
		Quality	Quality	Options	Brand	
DVD	А	2	1	5	2	\$369
	В	1	5	4	2	\$369
	С	5	3	1	1	\$369
	D	5	4	5	4	\$369
	E	3	3	3	3	\$369

Tyrone wants a DVD player that either has a "Very High" rating for Programming Options, or one that scores at least "Medium" on every feature.

Which three of the presented DVD players would Tyrone prefer? \_\_\_\_\_, \_\_\_\_, and \_\_\_\_\_

Question 10:

				Features		
	]	Picture	Sound	Programming	Reliability of	Price
		Quality	Quality	Options	Brand	
DVD	Α	2	1	5	4	\$369
	В	4	5	1	3	\$369
	С	1	3	5	5	\$369
	D	4	2	5	4	\$369
	Е	5	5	1	3	\$369

Julie wants the best Reliability of Brand, but is willing to give up one point on Reliability of Brand for each increase of at least two points in the rating of Picture Quality. She isn't concerned about the other features.

Which three of the presented DVD players would Julie prefer? \_\_\_\_\_, \_\_\_\_, and \_\_\_\_\_

<u>Instructions:</u> Each of these questions asks for your best guess at the chance that something will happen in the future. They use the "probability" scale that you see below. To answer each question, please put a mark on the scale at one specific tick mark, as follows:



If you think that something has no chance of happening, mark it as having a 0% chance. If you think that something is certain to happen, mark it as having a 100% chance.

Just to make sure that you are comfortable with the scale, please answer the following practice questions.

What is the probability that you will eat pizza during the next year?



What is the probability that you will get the flu during the next year?



That is the end of the practice. If you have any questions, please ask them now.

## A. The following questions ask about events that may happen some time during the next year.

0%

1. What is the probability that you will get into a car accident while driving during the next year? 100%



3. What is the probability that you will die (from any cause -- crime, illness, accident, and so on) during the next year?



4. What is the probability that someone will steal something from you during the next year?









7. What is the probability that someone will break into your home and steal something from you during the next year?







9. What is the probability that you will visit a dentist, for any reason, during the next year?



## B. The following questions ask about events that may happen some time during the next 5 years.

0%

1. What is the probability that you will get into a car accident while driving during the next 5 years? 100%



3. What is the probability that you will die (from any cause -- crime, illness, accident, and so on) during the next 5 years?



4. What is the probability that someone will steal something from you during the next 5 years?



5. What is the probability that you will move your permanent address to another state some time during the next 5 years?





7. What is the probability that someone will break into your home and steal something from you during the next 5 years?







9. What is the probability that you will visit a dentist, for any reason, during the next 5 years?



10. What is the probability that your driving will be accident-free during the next 5 years?



## In each of the following problems, choose between flipping a coin and a sure thing. Or, if they both seem the same to you, choose "Doesn't Matter."

1. Which do you like best, (1), (2), or (3)?

(1) Flip a Coin If Heads, win **\$100** If Tails, win **\$0** 

(2) Sure Win Win **\$50** for sure

(3) Doesn't Matter to Me

2. Which do you like best, (1), (2), or (3)?

(1)(2)(3)Flip a CoinSure WinDoesn't Matter to MeIf Heads, win \$100Win \$60 for sureIf Tails, win \$0

3. Which do you like best, (1), (2), or (3)?

 (1)
 (2)

 Flip a Coin
 Sure Win

 If Heads, win \$100
 Win \$40 for sure

 If Tails, win \$0
 If Sure Win

(3) Doesn't Matter to Me

### The next questions are about losses.

4. Which do you like best, (1), (2), or (3)?

(1) Flip a Coin If Heads, lose **\$100** If Tails, lose **\$0**  (2) Sure Loss Lose **\$50** for sure

5. Which do you like best, (1), (2), or (3)?

(1)(2)(3)Flip a CoinSure LossDoesn't Matter to MeIf Heads, lose \$100Lose \$60 for sureIf Tails, lose \$0

6. Which do you like best, (1), (2), or (3)?

(1) Flip a Coin If Heads, lose **\$100** If Tails, lose **\$0**  (2) Sure Loss Lose **\$40** for sure (3) Doesn't Matter to Me

## In each of the next questions, choose between flipping two coins and flipping one coin.

7. Which do you like best, (1), (2), or (3)?

(1) Flip Two Coins If Two Heads, win **\$100** Otherwise, win **\$0**  (2) *Flip One Coin* If Heads, win **\$50** If Tails, win **\$0**  (3) Doesn't Matter to Me

8. Which do you like best, (1), (2), or (3)?

(1) Flip Two Coins If Two Heads, win **\$100** Otherwise, win **\$0**  (2) *Flip One Coin* If Heads, win **\$60** If Tails, win **\$0**  (3) Doesn't Matter to Me

9. Which do you like best, (1), (2), or (3)?

(1) Flip Two Coins If Two Heads, win **\$100** Otherwise, win **\$0**  (2) *Flip One Coin* If Heads, win **\$40** If Tails, win **\$0** 

#### The next questions are about losses.

10. Which do you like best, (1), (2), or (3)?

(1)	(2)	(3)
Flip Two Coins	Flip One Coin	Doesn't Matter to Me
If Two Heads, lose <b>\$100</b>	If Heads, lose <b>\$50</b>	
Otherwise, lose <b>\$0</b>	If Tails, lose <b>\$0</b>	

11. Which do you like best, (1), (2), or (3)?

(1)	(2)	(3)
Flip Two Coins	Flip One Coin	Doesn't Matter to Me
If Two Heads, lose <b>\$100</b>	If Heads, lose <b>\$60</b>	
Otherwise, lose <b>\$0</b>	If Tails, lose <b>\$0</b>	

12. Which do you like best, (1), (2), or (3)?

(1)Flip Two Coins If Two Heads, lose **\$100** Otherwise, lose **\$0** 

(2)Flip One Coin If Heads, lose **\$40** If Tails, lose **\$0** 

(3) Doesn't Matter to Me

Questions 13 - 18 are just like 7 - 12 above, but one coin was already flipped. It came up heads, so you now have the following choices:

13. If you had already flipped once and it came up heads, which do you like best, (1), (2), or (3)?

(1)Flip Second Coin If Heads, win **\$100** If Tails, win **\$0** 

(2)Sure Win Win **\$50** for sure

14. If you had already flipped once and it came up heads, which do you like best, (1), (2), or (3)?

(1)(2)(3)Flip Second CoinSure WinDoesn't Matter to MeIf Heads, win \$100Win \$60 for sureIf Tails, win \$0

15. If you had already flipped once and it came up heads, which do you like best, (1), (2), or (3)?

(1) *Flip Second Coin* If Heads, win **\$100** If Tails, win **\$0**  (2) Sure Win Win **\$40** for sure (3) Doesn't Matter to Me

#### The next questions are about losses.

16. If you had already flipped once and it came up heads, which do you like best, (1), (2), or (3)?

(1) Flip Second Coin If Heads, lose **\$100** If Tails, lose **\$0**  (2) Sure Loss Lose **\$50** for sure (3) Doesn't Matter to Me

17. If you had already flipped once and it came up heads, which do you like best, (1), (2), or (3)?

(1) Flip Second Coin If Heads, lose **\$100** If Tails, lose **\$0**  (2) Sure Loss Lose **\$60** for sure

18. If you had already flipped once and it came up heads, which do you like best, (1), (2), or (3)?

(1)Flip Second Coin If Heads, lose **\$100** If Tails, lose **\$0** 

(2) Sure Loss Lose \$40 for sure

(3) Doesn't Matter to Me

In each of the next questions, a coin will be flipped to see if you get a choice or not. Without knowing the result of the first flip, what would you choose in each of the following situations?

19. First Flip:

> Flip a Coin If Heads, get the **Choice** below If Tails, don't get the Choice below, win \$0

**Choice**: Before the first flip, which do you like best, (1), (2), or (3)?

(1)Flip a Coin If Heads, win **\$100** If Tails, win **\$0** 

(2)Sure Win Win **\$50** for sure

(3) Doesn't Matter to Me

20. First Flip:

> Flip a Coin If Heads, get the Choice below If Tails, **don't** get the Choice below, win **\$0**

**Choice**: Before the first flip, which do you like best, (1), (2), or (3)?

(1)Flip a Coin If Heads, win **\$100** If Tails, win **\$0** 

(2)Sure Win Win **\$60** for sure

21. First Flip:

## *Flip a Coin* If Heads, get the **Choice** below If Tails, **don't** get the Choice below, win **\$0**

**Choice**: Before the first flip, which do you like best, (1), (2), or (3)?

(1) Flip a Coin If Heads, win **\$100** If Tails, win **\$0**  (2) Sure Win Win **\$40** for sure (3) Doesn't Matter to Me

## The next questions are about losses.

22. First Flip:

*Flip a Coin* If Heads, get the **Choice** below If Tails, **don't** get the Choice below, lose **\$0** 

**Choice**: Before the first flip, which do you like best, (1), (2), or (3)?

(1) Flip a Coin If Heads, lose **\$100** If Tails, lose **\$0**  (2) Sure Win Lose **\$50** for sure (3) Doesn't Matter to Me

23. First Flip:

*Flip a Coin* If Heads, get the **Choice** below If Tails, **don't** get the Choice below, lose **\$0** 

**Choice**: Before the first flip, which do you like best, (1), (2), or (3)?

(1) Flip a Coin If Heads, lose **\$100** If Tails, lose **\$0**  (2) Sure Win Lose **\$60** for sure

## 24. First Flip:

## *Flip a Coin* If Heads, get the **Choice** below If Tails, **don't** get the Choice below, lose **\$0**

**Choice**: Before the first flip, which do you like best, (1), (2), or (3)?

(1) Flip a Coin If Heads, lose **\$100** If Tails, lose **\$0**  (2) Sure Win Lose **\$40** for sure

Each of the following problems presents a choice between two options. Each problem is presented with a scale ranging from 1 (representing one option) through 6 (representing the other option). For each item, please circle the number on the scale that best reflects your relative preference between the two options.

## Problem 1

You are buying a gold ring on layaway for someone special. It costs \$200 and you have already paid \$100 on it, so you owe another \$100. One day, you see in the paper that a new jewelry store is selling the same ring for only \$90 as a special sale, and you can pay for it using layaway. The new store is across the street from the old one. If you decide to get the ring from the new store, you will not be able to get your money back from the old store, but you would save \$10 overall.

Would you be more likely to continue paying at the old store or buy from the new store?

	1	2	3	4	5	6	
Most likely to						Most likely	y to
continue payi	ing at tl	ne old store			b	uy from the	new store

#### **Problem 2**

You enjoy playing tennis, but you really love bowling. You just became a member of a tennis club, and of a bowling club, both at the same time. The membership to your tennis club costs \$200 per year and the membership to your bowling club \$50 per year. During the first week of both memberships, you develop an elbow injury. It is painful to play either tennis or bowling. Your doctor tells you that the pain will continue for about a year.

Would you be more likely to play tennis or bowling in the next six months?

123456Most likely to<br/>play tennisMost likely to<br/>play bowling

### Problem 3

You have been looking forward to this year's Halloween party. You have the right cape, the right wig, and the right hat. All week, you have been trying to perfect the outfit by cutting out a large number of tiny stars to glue to the cape and the hat, and you still need to glue them on. On the day of Halloween, you decide that the outfit looks better without all these stars you have worked so hard on.

Would you be more likely to wear the stars or go without?

1	2	3	4	5	6
Most likely to	1			Ν	Aost likely to
wear stars				n	ot wear stars

After a large meal at a restaurant, you order a big dessert with chocolate and ice cream. After a few bites you find you are full and you would rather not eat any more of it.

Would you be more likely to eat more or to stop eating it?

123456Most likely to<br/>eat moreMost likely to<br/>stop eating

## Problem 5

You are in a hotel room for one night and you have paid \$6.95 to watch a movie on pay TV. Then you discover that there is a movie you would much rather like to see on one of the free cable TV channels. You only have time to watch one of the two movies.

Would you be more likely to watch the movie on pay TV or on the free cable channel?

1	2	3	4	5	6	
Most likely to	)			Μ	ost likely	to
watch pay TV	r			wat	ch free c	able

## Problem 6

You have been asked to give a toast at your friend's wedding. You have worked for hours on this one story about you and your friend taking drivers' education, but you still have some work to do on it. Then you realize that you could finish writing the speech faster if you start over and tell the funnier story about the dance lessons you took together.

Would you be more likely to finish the toast about driving or rewrite it to be about dancing?

123456Most likely toMost likely towrite about drivingwrite about dancing

## Problem 7

You decide to learn to play a musical instrument. After you buy an expensive cello, you find you are no longer interested. Your neighbor is moving and you are excited that she is leaving you her old guitar, for free. You'd like to learn how to play it.

Would you be more likely to practice the cello or the guitar?

1	2	3	4	5	6
Most likely to	)			N	lost likely to
play cello					play guitar

You and your friend are at a movie theater together. Both you and your friend are getting bored with the storyline. You'd hate to waste the money spent on the ticket, but you both feel that you would have a better time at the coffee shop next door. You could sneak out without other people noticing.

Would you be more likely to stay or to leave?

1 2 3 4 5 6 Most likely to stay leave

## Problem 9

You and your friend have driven halfway to a resort. Both you and your friend feel sick. You both feel that you both would have a much better weekend at home. Your friend says it is "too bad" you already drove halfway, because you both would much rather spend the time at home. You agree.

Would you be more likely to drive on or turn back?

1	2	3	4	5	6
Most likely to				Μ	lost likely to
drive on					turn back

## Problem 10

You are painting your bedroom with a sponge pattern in your favorite color. It takes a long time to do. After you finish two of the four walls, you realize you would have preferred the solid color instead of the sponge pattern. You have enough paint left over to redo the entire room in the solid color. It would take you the same amount of time as finishing the sponge pattern on the two walls you have left.

Would you be more likely to finish the sponge pattern or to redo the room in the solid color?

1	2	3	4	5	6	
Most likely to				Μ	ost likely to	
finish sponge patt	ern			redo	with a solid col	01

Each of the following problems presents a choice between two options. Each problem is presented with a scale ranging from 1 (representing one option) through 6 (representing the other option). For each item, please circle the number on the scale that best reflects your relative preference between the two options.

## Problem 1

Imagine a hospital is treating 32 injured soldiers, who are all expected to lose one leg. There are two doctors that can help the soldiers, but only one can be hired:

If Doctor A is hired, 12 soldiers will lose one leg.

If Doctor B is hired, there is a 63% chance that nobody loses a leg and a 37% chance that all lose a leg.

Which doctor do you recommend?

1	2	3	4	5	6	
Definitely we	ould			Def	initely woul	d
choose A					choose B	

#### Problem 2

Imagine that the U.S. is preparing for the outbreak of an unusual disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:

If Program A is adopted, 400 people will die.

If Program B is adopted, there is a 33% chance that nobody will die, and a 67% chance that 600 people will die.

Which program do you recommend to use?

1	2	3	4	5	6	
Definitely we	ould			Def	initely wo	ould
choose A					choose B	

Imagine that your client has \$6,000 invested in the stock market. A downturn in the economy is occurring. You have two investment strategies that you can recommend under the existing circumstances to preserve your client's capital.

If strategy A is followed, \$4,000 of your client's investment will be lost.

If strategy B is followed, there is a 33% chance that the nothing will be lost, and a 67% chance that \$6,000 will be lost.

Which of these two strategies would you favor?

	1	2	3	4	5	6	
Definitely wou	ıld				Def	initely wou	ld
choose A						choose B	

#### Problem 4

Because of changes in tax laws, you may get back as much as \$1200 in income tax. Your accountant has been exploring alternative ways to take advantage of this situation. He has developed two plans:

If Plan A is adopted, you will lose \$800 of the possible \$1200.

If Plan B is adopted, you have a 33% chance of losing none of the money, and a 67% chance of losing all \$1200.

Which plan would you use?

1	2	3	4	5	6	
Definitely wo	ould			Def	initely wo	uld
choose A					choose B	

#### Problem 5

Imagine that recent evidence has shown that a pesticide is threatening the lives of 1,200 endangered animals. Two response options have been suggested:

If Option A is used, 600 animals will be lost for sure.

If Option B is used, there is a 75% chance that 400 animals will be lost, and a 25% chance that 1,200 animals will be lost.

Which option do you recommend to use?

1	2	3	4	5	6	
Definitely wo	ould			Def	ïnitely wo	uld
choose A					choose B	

Imagine that your doctor tells you that you have a cancer that must be treated. Your choices are as follows:

Surgery: Of 100 people having surgery, 10 die because of the operation, and 66 die by the end of five years.

Radiation therapy: Of 100 people having radiation therapy, none die during the treatment, and 78 die by the end of five years.

Which treatment would you choose?

1	2	3	4	5	6	
Definitely we	ould			Def	initely w	ould
choose surg	ery			cho	ose radia	tion

#### **Problem 7**

Imagine that in one particular state it is projected that 1000 students will drop out of school during the next year. Two programs have been proposed to address this problem, but only one can be implemented. Based on other states' experiences with the programs, estimates of the outcomes that can be expected from each program can be made. Assume for purposes of this decision that these estimates of the outcomes are accurate and are as follows:

If Program A is adopted, 600 of the 1000 students will drop out of school.

If Program B is adopted, there is a 40% chance that none of the 1000 students will drop out of school and 60% chance that all 1000 students will drop out of school.

Which program would you favor for implementation?

123456Definitely would<br/>choose ADefinitely would<br/>choose BDefinitely would

Each of the following problems ask you to rate your judgment of a product or a situation. Each problem is presented with a scale ranging from 1 (representing the worst rating) through 6 (representing the best rating). For each problem, please circle the number on the scale that best reflects your judgment.

## Problem 1

As R&D manager, one of your project teams has come to you requesting an additional \$100,000 in funds for a project you instituted several months ago. The project is already behind schedule and over budget, but the team still believes it can be successfully completed. You currently have \$500,000 remaining in your budget unallocated, but which must carry you for the rest of the fiscal year. Lowering the balance by an additional \$100,000 might jeopardize flexibility to respond to other opportunities.

Evaluating the situation, you believe there is a fair chance the project will not succeed, in which case the additional funding would be lost; if successful, however, the money would be well spent. You also noticed that of the projects undertaken by this team, 20 of the last 50 have been unsuccessful.

What is the likelihood you would fund the request?

1	2	3	4	5	6
Very unlikely					Very likely

#### Problem 2

Imagine that a woman parked illegally. After talking to her, you believe that there is an 80% chance that she knew she parked illegally.

With this in mind, how much of a fine do you believe this woman deserves?

123456Minimum fineMaximum fine

### Problem 3

In a recent confidential survey completed by graduating seniors, 65% of those completing the survey stated that they had cheated during their college career.

Considering the results of the survey, how would you rate the incidence of cheating at your university?

123456Very lowVery high

Imagine that a new technique has been developed to treat a particular kind of cancer. This technique has a 50% chance of failure, and is available at the local hospital.

A member of your immediate family is a patient at the local hospital with this kind of cancer. How likely are you to encourage him or her to undergo treatment using this technique?

123456Definitely noDefinitely yes

### **Problem 5**

Imagine the following situation. You are entertaining a special friend by inviting them for dinner. You are making your favorite lasagna dish with ground beef. Your roommate goes to the grocery store and purchases a package of ground beef for you. The label says 20% fat ground beef.

What's your evaluation of the quality of this ground beef?

1	2	3	4	5	6
Very low					Very high

#### Problem 6

Imagine that a type of condom has a 5% failure rate. That is, if you have sex with someone who has the AIDS virus, there is a 5% chance that this type of condom will fail to prevent you from being exposed to the AIDS virus.

Should the government allow this type of condom to be advertised as "an effective method for lowering the risk of AIDS?"

123456Definitely noDefinitely yes

## Problem 7

Suppose a student got 10% incorrect in the mid-term exam and 30% incorrect in the final-term exam, what would be your evaluations of this student's performance?

1	2	3	4	5	6
Very poor					Very good

The following problems ask *out of 100 people your age*, how many would say that it is sometimes OK to do different things. For each question, please circle a number between 0 (meaning *no one* thinks that it is sometimes OK) and 100 (meaning *everyone* thinks that it is sometimes OK).

1.	Out of 100 people your age, how many would say it is sometimes OK to steal under certain circumstances?											
No	0 one	10	20	30	40	50	60	70	80	90	100 Everyone	
2.	Out of	100 pe	ople you	ur age, to smo	how ma oke ciga	any wou arettes?	ıld say i	t is som	netimes	OK .		
No	0 one	10	20	30	40	50	60	70	80	90	100 Everyone	
3.	•. Out of 100 people your age, how many would say it is sometimes OK to commit a crime which could put you in jail?											
No	0 one	10	20	30	40	50	60	70	80	90	100 Everyone	
4.	Out of	100 pe	ople you	ur age, to kee	how ma p things	any wou s you fir	ild say i nd in the	t is som e street?	netimes	OK .		
No	0 one	10	20	30	40	50	60	70	80	90	100 Everyone	
5.	Out of	100 pe	ople you	ur age, to exp	how ma eriment	any wou with m	ıld say i arijuan	it is som a?	netimes	OK .		
No	0 one	10	20	30	40	50	60	70	80	90	100 Everyone	
6.	Out of	100 pe	ople yo	ur age, to use	how ma your fis	any wou sts to re	ıld say i solve a	t is som conflict	netimes ??	OK .		
No	0 one	10	20	30	40	50	60	70	80	90	100 Everyone	

7.	Out of	100 pe	ople yo	ur age, . to drir	how ma nk and d	any wou lrive?	ıld say i	t is som	etimes	OK .	
No	0 o one	10	20	30	40	50	60	70	80	90	100 Everyone
8.	Out of	100 pe	ople yo	ur age, . to yell	how ma and arg	any wou gue to se	ıld say i olve a c	t is som onflict?	etimes	OK .	
No	0 o one	10	20	30	40	50	60	70	80	90	100 Everyone
9.	Out of	<sup>°</sup> 100 pe	ople yo 	ur age, . not to	how ma hold the	any wou e door o	ild say i open for	t is som people	etimes ?	OK .	
No	0 o one	10	20	30	40	50	60	70	80	90	100 Everyone
10	. Out o	of 100 p	eople y 	our age . not to	, how m tell the	nany wo police v	ould say when yo	it is so ou witne	metime ess a cri	s OK me?	
No	0 o one	10	20	30	40	50	60	70	80	90	100 Everyone
11	. Out o	of 100 p	eople y 	our age . not to	, how n give di	nany wo rections	ould say to som	it is some one wh	metime 10 is los	s OK st?	
No	0 o one	10	20	30	40	50	60	70	80	90	100 Everyone
12	. Out c	of 100 p	eople y 	our age . not to	, how m be on ti	nany wo	ould say appoint	it is something the second sec	metime	s OK	
No	0 o one	10	20	30	40	50	60	70	80	90	100 Everyone
13	. Out c	of 100 p	eople y 	our age . not to	, how m return s	nany wo	ould say ng you	it is so borrowe	metime ed?	s OK	
No	0 o one	10	20	30	40	50	60	70	80	90	100 Everyone

14. Out of 100 people your age, how many would say it is sometimes OK not to keep secrets that a friend told you?										
0 No one	10	20	30	40	50	60	70	80	90	100 Everyone
15. Out of 100 people your age, how many would say it is sometimes OK not to return phone calls right away?										
0 No one	10	20	30	40	50	60	70	80	90	100 Everyone
16. Out of 100 people your age, how many would say it is sometimes OK not to spend time with friends in need?										
0 No one	10	20	30	40	50	60	70	80	90	100 Everyone