Online Appendix for "Disclosure under Unawareness: An Experiment"

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Abstract

This online appendix contains instructions, screenshots, and the questionnaire.

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A Experimental Instructions

A.1 Experimental Instructions - USA Sample

U

Instructions for the Market Game

Welcome to the experiment!

Please now turn off your cell phones. These must remain turned off for the duration of the experiment. The amount of money you will earn in this experiment will depend on your choices. Thus, it is in your best interest to follow these instructions carefully. You will be paid in cash at the end of the experiment. During the experiment, we ask that you please do not talk to each other. If you have any question, please raise your hand and an experimenter will assist you.

The experiment is made up of 3 phases. The first phase consists of a repeated market game. In the second phase you will complete a simple test. The third phase consists of a questionnaire.

Phase 1

The market game is repeated for 16 rounds. In each round you will be randomly selected as a seller or buyer and then paired up with another participant in the other role. Your role assignment is shown to you on the computer screen as the experiment proceeds. The market works as follows:

Each market consists of one seller and one buyer. The seller can sell an imaginary object with a fixed price of $4 to the buyer. The object's quality may differ. The quality is randomly chosen from 2 and 3 with equal probability by the computer. 3 represents the higher quality while 2 is the lower quality. At the beginning of each round, the seller is notified of the objects's quality (q), which is displayed on the computer screen. The seller is able to supply as many objects of that quality as demanded by the buyer. The buyer does not know the object's quality unless the seller chooses to provide some information about the quality to the buyer. The seller can communicate through the computer any set of qualities to the buyer provided that (s)he does not exclude the true quality.

For instance, if the true quality is 2, then the seller can send one of the the following two messages shown in the right-hand side column of the following table to the buyer. The images in the column on the left are the associated messages displayed on the computer screen. The shaded number(s) is(are) contained in the message. So if the true quality is 2, any possible message sent by the seller must include the true quality 2.

2	"The quality is 2."
2 3	"The quality is either 2 or 3."

After receiving the information, the buyer selects the quantity of the good (x) to purchase. The quantity to purchase is restricted to 1, 2, 3, and 4 and only one of these four integers is acceptable as the buyer's purchasing quantity.

The seller's payoff in each round is the price of the object ($4) multiplied by the number of units (x) sold to the buyer:

$$4 \cdot x.$$

The buyer's payoff in each round is determined by both the quantity purchased (x) and the true quality (q) of the object, which is net off the price paid to the seller. It can be easily calculated by the following table. The entries in the table show the buyer's payoff for each true quality level (in columns) and units purchased (in rows). For instance, if the true quality is $q = 3$ and you purchase 1 unit (that is $x = 1$), then as the buyer your payoff in this round is $8.

		Quality	
		$q = 2$	$q = 3$
Units Purchased	$x = 1$	10	8
	$x = 2$	16	12
	$x = 3$	10	18
	$x = 4$	7	12

After the buyer informs the seller about the quantity purchased via the computer, the computer will show the seller and the buyer the quantity purchased, the true quality and their own payoffs for the round just played. For an instance, if the true quality is 2 and the buyer chooses to purchase 4 units, then the seller's payoff is $16 and the buyer's payoff is $7.

The experiment proceeds to the next round after both the seller and the buyer acknowledge this information by clicking the button on the computer screen. In the next round, each participant again is randomly selected to be a buyer or a seller and randomly matched with some participant of the experiment to play the market game. The true

quality of the seller in this market game is also randomly selected and may differ from the true quality of the prior round. Phase 1 ends after 16 rounds of the market game have been played.

Phase 2

Phase 2 consists of a simple test. The test is made up of 30 questions. For every question, there is a pattern with a piece missing and a number of pieces below the pattern. You have to choose which of the pieces below is the missing one to complete the pattern. For each question, one and only one of these pieces is the missing one to complete the pattern. You will score 1 point for every correct answer. After completing the test, you will be informed of your own test score. The test score will not affect your payment that you receive from the experiment.

After completing both phases 1 and 2, your cash payment will be displayed on your computer screen. Your cash payment will be your payoff from one round randomly drawn from the 16 rounds of the market game plus a $5 show-up fee.

Phase 3

While waiting to be called upon for payment, please complete the questionnaire that the experimenter will hand you. The questionnaire contains questions about demographics. Please carefully complete this questionnaire as this information is very important to us. After completing the questionnaire, please remain in your seat until you have been called upon for payment.

Thank you very much for your participation.

A.2 Experimental Instructions - China and China* Samples

市场博弈实验说明

欢迎参加我们的经济学实验!

首先请关闭您的手机，并确保您的手机在整个实验过程中保持关闭状态。

您的实验收益取决于您的决策。因此，请仔细阅读并按照实验指示进行选择。实验结束时，我们会以现金（微信支付）形式向您支付实验报酬。在实验过程中，请不要与其他实验参与者交谈。如果您有任何问题，请举手示意，我们的实验管理人员会及时协助。

实验由两部分组成：1）市场博弈游戏；2）调查问卷。

阶段 1：

重复 16 轮的市场博弈游戏。每一轮的博弈中，实验参与者将会被随机选为卖家（或买家），并与选为买家（或卖家）的实验参与者组成一对。实验进行中每一轮的角色分配均会显示在计算机屏幕上。市场博弈的过程如下:

每个市场由一名卖家和一名买家组成。卖家出售一种虚构物品给买家，价格为 8 元每个。每轮博弈中物品质量会不同，质量由计算机以同等的概率从 2 和 3 中随机抽取。3 代表高质量，而 2 代表低质量。每轮博弈开始，卖家的计算机屏幕会显示该轮次物品的质量 (q)。卖家可以尽可能多的提供该物品以满足买家需求。买家一开始并不知道物品的质量，但可以通过卖家提供的有关物品质量信息进行了解。卖家通过计算机发送包含真实质量的信息给买家。

举例来说，如果真实质量是 2，那么卖家可以从以下两个消息中选择一个发送给买家:

2	“质量是 2”
2 或 3	“质量是 2 或 3”

表格中左侧竖列是计算机显示的选项，右侧竖列是相应的消息。其中数字 2 均包含在两个消息中。所以如果真实质量是 2，卖家发送的任何可能的消息均应包含数字 2。

买家在接收到信息之后需要选择购买数量 (x)。实验将买家可以购买的数量限制在 1、2、3、4，买家仅可在这四个整数中选择一个进行购买。

卖家每轮博弈的收益为物品单价乘以卖出的数量：$8 \cdot x$。

买家每轮博弈的收益取决于购买数量和物品的真实质量，是偿付卖家后的净收益。具体计算结果如下表所示。表中列代表质量等级，行代表购买数量。例如，如果真实质量是 3 ($q = 3$)，买家购买 1 个 ($x = 1$)，买家此轮的收益为 16。

		质量	
		$q = 2$	$q = 3$
购买数量	$x = 1$	20	16
	$x = 2$	32	24
	$x = 3$	20	36
	$x = 4$	14	24

在买家通过计算机告知卖家购买数量之后，该轮博弈结束，计算机会将这一轮博弈中的真实质量、购买数量、自身收益展示给卖家和买家。例如，如果真实质量是 2，然后买家选择购买 4 个，那么卖家的收益为 32，而买家的收益则为 14。

卖家和买家在计算机屏幕上点击确认后实验将进行至下一轮博弈。同样，每个实验参与者重新随机分配为卖家和买家，互相匹配后开始进行市场博弈。物品的真实质量也会再次随机抽取，可能与前一轮博弈中的真实质量不同。

完成 16 轮博弈之后实验的第一阶段结束。此时计算机屏幕会显示您参与实验所获得的报酬。您的实验报酬是由计算机从 16 轮市场博弈中随机抽取一轮的收益加上 10 元的实验出场费用组成。

阶段 2：

在等待收取实验报酬的同时，我们的实验研究人员会发放给您一份调查问卷。这份调查问卷包含人口统计的一些问题。请您认真完成这份问卷，它将对实验研究会产生非常大的帮助。在您完成问卷之后，请留在您的座位上，我们的实验人员会依次放发实验报酬，当您被叫到时，请携带问卷前去领取实验报酬。

感谢您的参与!

B Questionnaire

B.1 Questionnaire - USA Sample

1. What is your gender?
   ☐ Male ☐ Female

2. What is your primary racial background?
   ☐ White ☐ Black or African ☐ Native American ☐ Asian
   ☐ Hawaiian or other Pacific Islander ☐ Mixed or other

3. What language(s) do you speak? _____

4. How fluent are you in English?
   ☐ Native ☐ Fluent ☐ Basic ☐ Least

5. What academic year are you currently in?
   ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th ☐ 5th ☐ 6th ☐ Graduate

6. What is (are) your major(s)? _____

7. What is your GPA? _____

8. Have you taken any course on the game theory?
   ☐ Yes ☐ No

9. Have you taken any course in microeconomics?
   ☐ Yes ☐ No

10. Have you taken any course in decision making?
    ☐ Yes ☐ No

11. How old are you (in years)? _____

12. Have you participated in an economics experiment before?
    ☐ Yes ☐ No

13. Did you find this experiment fun to play?
    ☐ Yes ☐ No

14. Did you have difficulties in understanding the experiment?
    ☐ Yes ☐ No

15. Are you interested in playing chess or other similar strategy games?
    ☐ Yes ☐ No

16. How do you see yourself? Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks? Please check a box on below scale, where the value 0 means `not at all willing to take risks' and the value 10 means `very willing to take risks'.

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10

Not at all willing to take risks — Very willing to take risks

17. How do you see yourself? Are you generally a person who embraces novel things or do you hesitate to adopt novelties? Please check a box on the scale, where the value 0 means `not at all willing to adopt novelties' and the value 10 means `very willing to adopt novelties'.

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10

Not at all willing to adopt novelties — Very willing to adopt novelties

B.2 Questionnaire - China and China* Samples

调查问卷

1、您的性别?
☐ 男 ☐ 女

2、您目前最高学历?
☐ 大一 ☐ 大二 ☐ 大三 ☐ 大四 ☐ 硕士研究生 ☐ 博士研究生

3、您目前所修的专业? _____

4、您的平均成绩是多少? _____

5、您学习过《博弈论》的相关课程吗?
☐ 是 ☐ 否

6、您学习过《微观经济学》的相关课程吗?
☐ 是 ☐ 否

7、您学习过《决策论》的相关课程吗?
☐ 是 ☐ 否

8、您的年龄? _____

9、您参加过经济学相关的实验吗?
☐ 是 ☐ 否

10、您觉得此次实验有趣吗?
☐ 是 ☐ 否

11、您觉得此次实验理解上有难度吗?
☐ 是 ☐ 否

12、您喜欢玩围棋、象棋等策略类游戏吗?
☐ 是 ☐ 否

13、您如何评价自己?当您面对风险,您一般是完全准备好承受风险,还是总是尝试规避风险?请在以下的等级中进行选择,其中 0 代表完全不能承受风险,10 代表非常愿意承受风险。

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10

14、您如何评价自己?当您面对新事物,您一般是愿意开放的心态面对新事物,还是迟疑不决?请在以下的等级中进行选择,其中 0 代表完全不能适应新事物,10 代表非常愿意接受新事物。

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
0	1	2	3	4	5	6	7	8	9	10

C Screenshots

C.1 Screenshots for the USA Sample

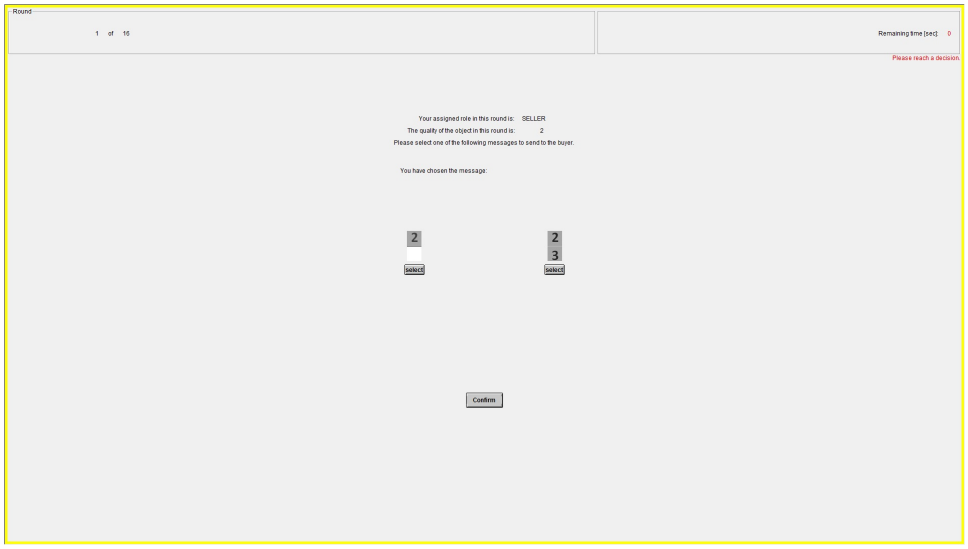


Figure 1: Seller's Message Options Rounds 1 to 15

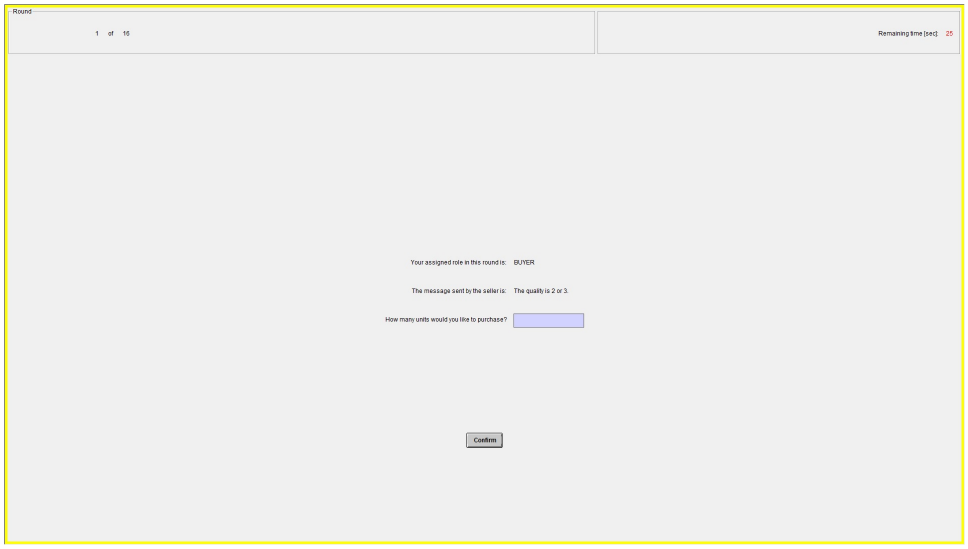


Figure 2: Buyer's Purchase Decision Rounds 1 to 15

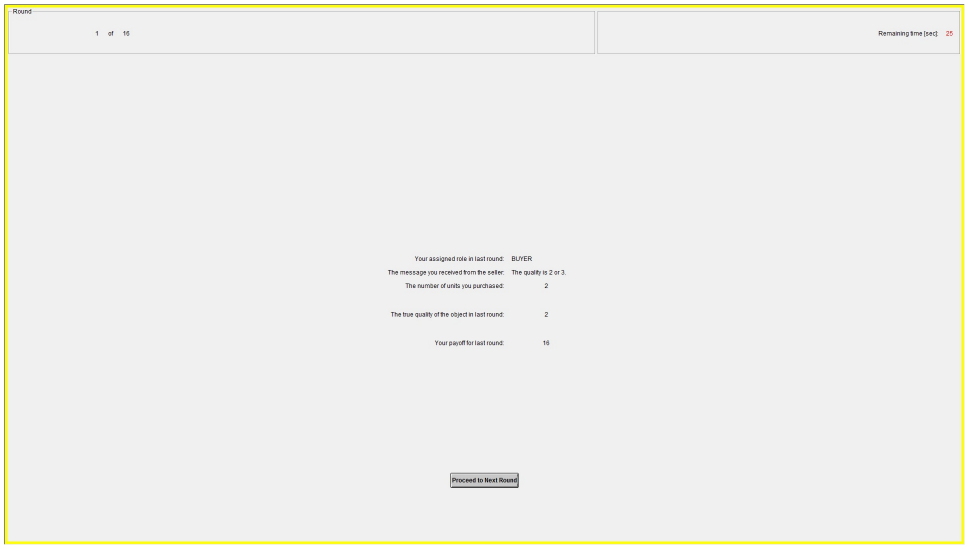


Figure 3: Buyer's Payoff Information at the End of Rounds 1 to 15

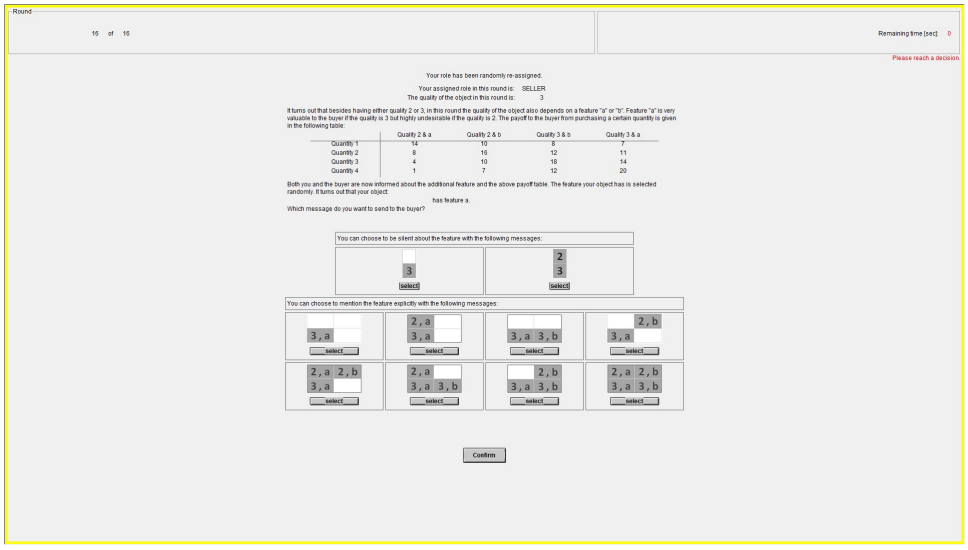


Figure 4: Seller's Message Options Round 16 in Treatment A

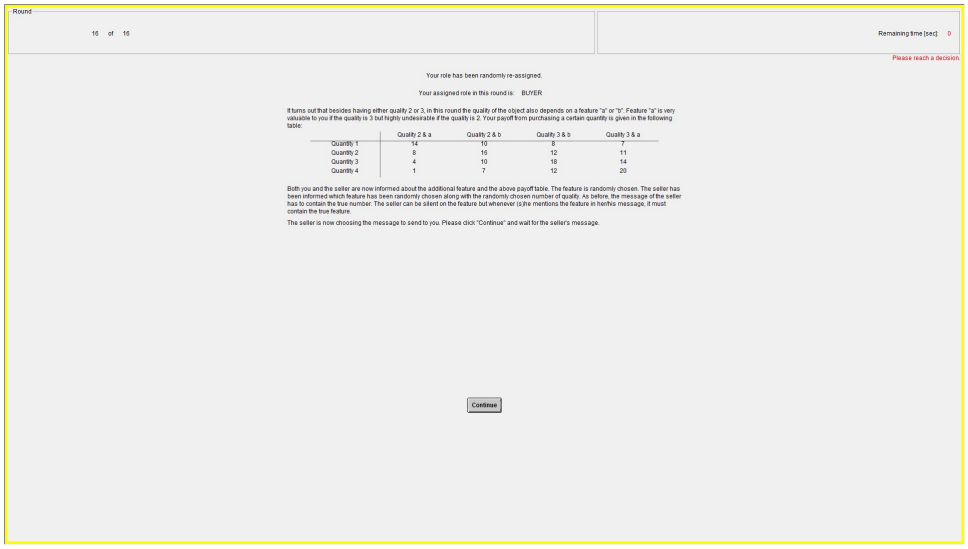


Figure 5: Buyer's Information Round 16 in Treatment A

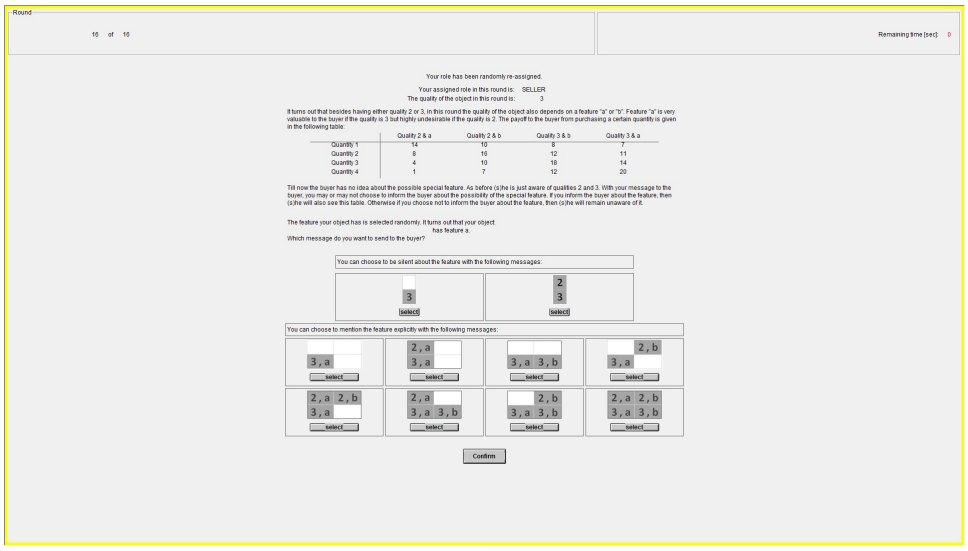


Figure 6: Seller's Message Options Round 16 in Treatment U

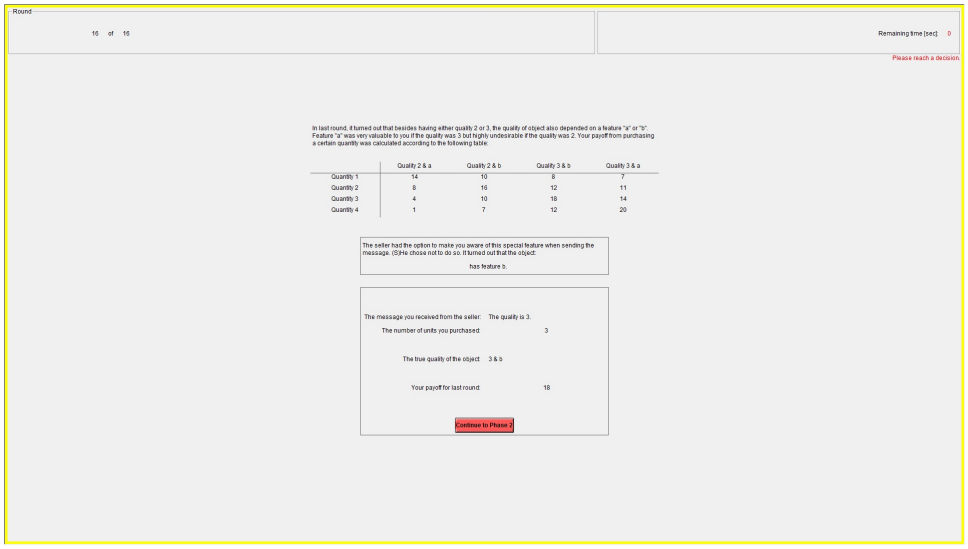
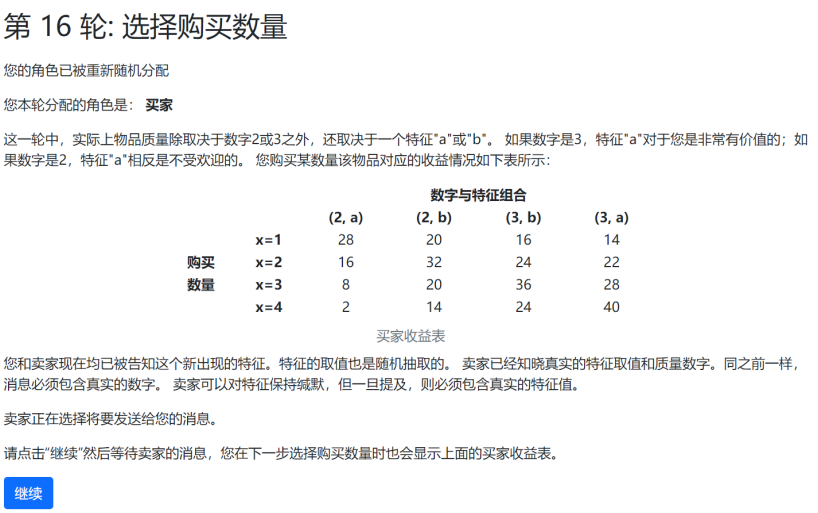


Figure 7: Buyer's Payoff Information Round 16 in Treatment U

C.2 Screenshots for the China Sample

Screenshots for Treatment A, China Sample, Buyer, Round 16



第 16 轮: 选择购买数量

您的角色已被重新随机分配

您本轮分配的角色是： **买家**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于您是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 您购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

您和卖家现在均已被告知这个新出现的特征。特征的取值也是随机抽取的。 卖家已经知晓真实的特征取值和质量数字。同之前一样，消息必须包含真实的数字。 卖家可以对特征保持缄默，但一旦提及，则必须包含真实的特征值。

卖家正在选择将要发送给您的消息。

请点击"继续"然后等待卖家的消息，您在下一步选择购买数量时也会显示上面的买家收益表。

继续

Round 16: Choose A Quantity to Purchase

Your role has been randomly re-assigned.

Your assigned role in this round is: **BUYER**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. Your payoff from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Both you and the seller are now informed about the additional feature and the above payoff table. The feature is randomly chosen. The seller has been informed which feature has been randomly chosen along with the randomly chosen number of quality. As before, the message of the seller has to contain the true number. The seller can be silent on the feature but whenever (s)he mentions the feature in her/his message, it must contain the true feature.

The seller is now choosing the message to send to you.

Please click ”Continue” and wait for the seller’s message. The above payoff table will still show in the next step when you make your decision on quantity to purchase.

Continue

第 16 轮：选择购买数量

您本轮分配的角色是： **买家**

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

卖家发送的消息：质量是 **(2, a), (2, b), (3, b), 或 (3, a)**

您的购买数量是多少?

确认

Round 16: Choose A Quantity to Purchase

Your assigned role in this round is: **BUYER**

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

The message sent by the seller: The quality **is (2, a), (2, b), (3, b) or (3, a)**

How many units would you like to purchase?

Confirm

上一轮的结果

您的角色是 **买家**

您收到的来自于卖家的消息：质量是 **(2, a), (2, b), (3, b), 或 (3, a)**

您的购买数量是 **1** 单位

物品的真实质量是 **(2, a)**

您上一轮的收益是：**28.00元**

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

查看实验报酬

Results of Last Round

Your role was: **Buyer**

The message you received from the seller: The quality is **(2, a), (2, b), (3, b) or (3, a)**

The number of units you purchased: **1 unit**

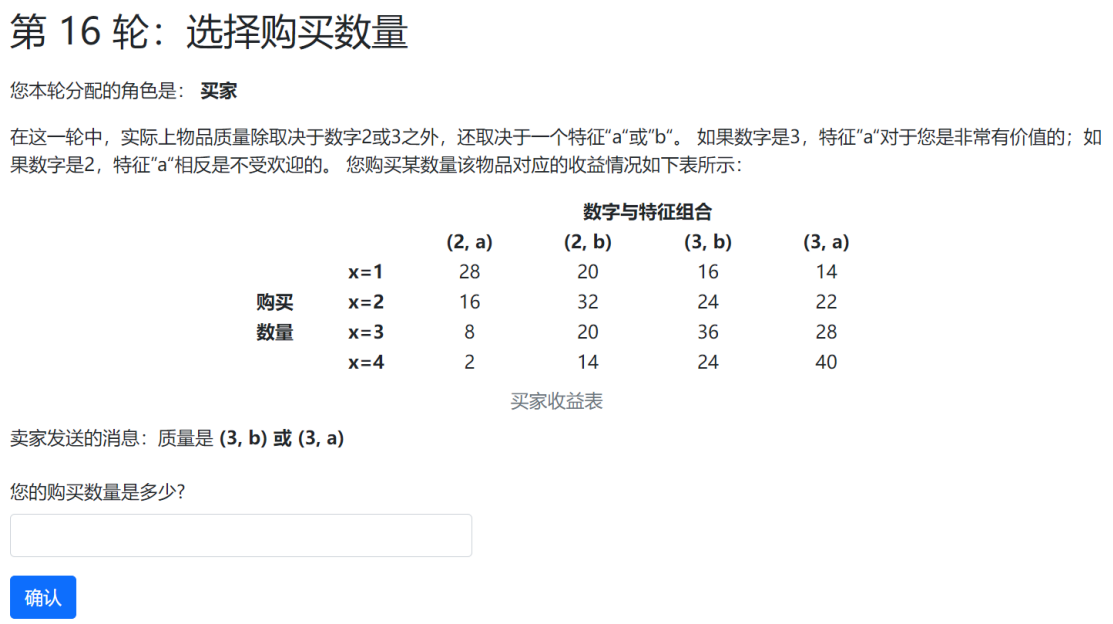
The true quality is **(2, a)**

Your payoff for last round: **28 CNY**

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Click to see your payment from the experiment

Screenshots for Treatment U, China Sample, Buyer, Round 16, After Seller Raised Awareness



第 16 轮：选择购买数量

您本轮分配的角色是： **买家**

在这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于您是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 您购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

卖家发送的消息：质量是 **(3, b) 或 (3, a)**

您的购买数量是多少?

确认

Round 16: Choose A Quantity to Purchase

Your assigned role in this round is: **BUYER**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature "a" or "b". Feature "a" is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. Your payoff from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

The message sent by the seller: The quality is **(3, b)** or **(3, a)**

How many units would you like to purchase?

Confirm

上一轮的结果

您的角色是 **买家**

		数字与特征组合			
		(2, a)	**(2, b)**	**(3, b)**	**(3, a)**
购买数量	**x=1**	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

您收到的来自于卖家的消息：质量是 **(3, b) 或 (3, a)**

您的购买数量是 **3** 单位

物品的真实质量是 **(3, b)**

您上一轮的收益是：**36.00元**

查看实验报酬

Results for the last round

Your assigned role: **BUYER**

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

The message received from the seller: The quality is **(3, b)** or **(3, a)**

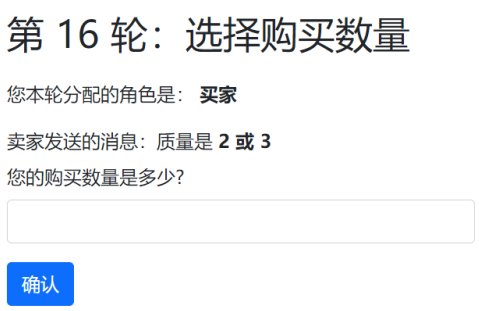
The number of units purchased by you is **3**.

The true quality is **(3, b)**.

Your payoff in the last round: **36 CNY**

Click to see your payment from the experiment

Screenshots for Treatment U, China Sample, Buyer, Round 16, After the Seller Does Not Raise Awareness



Round 16: Choose A Quantity to Purchase

Your assigned role in this round is: **BUYER**

The message sent by the seller: The quality is **2 or 3**

How many units would you like to purchase?

Confirm

上一轮的结果

您的角色是 **买家**

上一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。

如果质量是3，特征"a"对于您是非常有价值的；如果质量是2，特征"a"相反是不受欢迎的。

您购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

发送消息时，卖家可以选择让您觉察到这一特征的存在，但他（她）并没有这么做。

物品的真实质量是 **(2, a)**

您收到的来自于卖家的消息：质量是 **2 或 3**

您的购买数量是 **2** 单位

您上一轮的收益是：**16.00元**

查看实验报酬

Results of Last Round

Your role was: **Buyer**

It turns out that besides having either 2 or 3, the quality of the object also depends on a feature "a" or "b".

Feature "a" is very valuable to you if the quality is 3 but undesirable if the quality is 2.

The payoff to you from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

The seller had the option to make you aware of this special feature when sending the message. (S)He chose not to do so.

The true quality of the object is: **(2, b)**

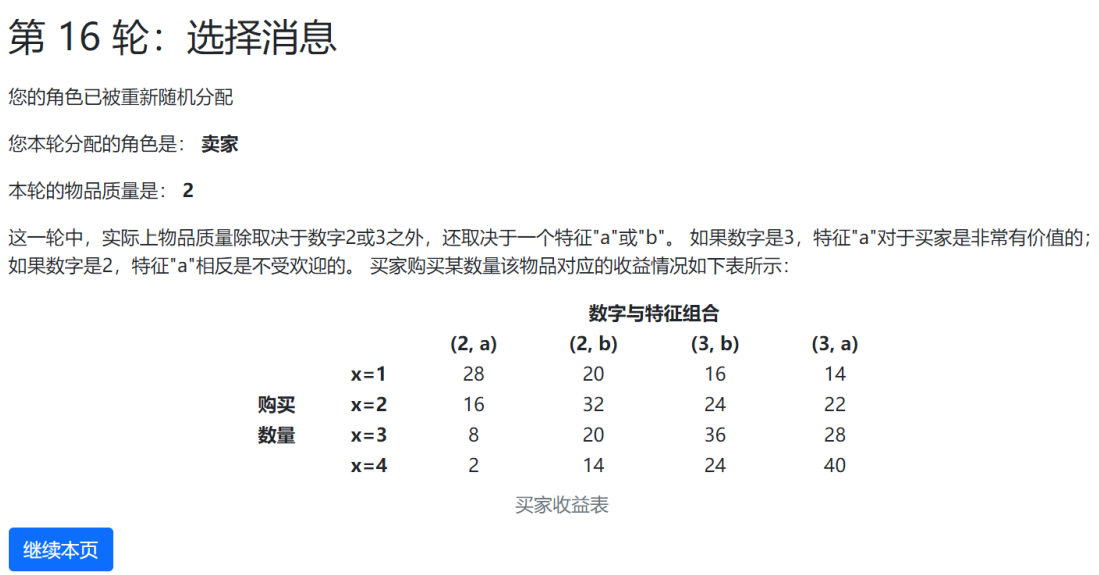
The message you received from the seller: The quality is **2 or 3**

The number of units you purchased: 2

Your payoff for last round: **32 CNY**

Click to see your payment from the experiment

Screenshots for Treatment A, China Sample, Seller, Round 16



第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

继续本页

Round 16: Choose A Message

Your role has been randomly re-assigned.

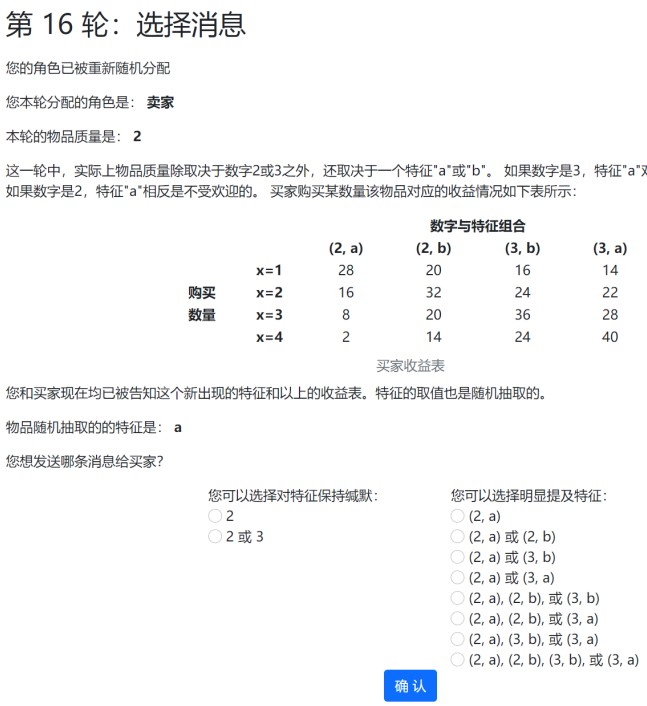
Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Continue



第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；
如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

您和买家现在均已被告知这个新出现的特征和以上的收益表。特征的取值也是随机抽取的。

物品随机抽取的的特征是： **a**

您想发送哪条消息给买家？

您可以选择对特征保持缄默：
- 2
- 2 或 3

您可以选择明显提及特征：
- (2, a)
- (2, a) 或 (2, b)
- (2, a) 或 (3, b)
- (2, a) 或 (3, a)
- (2, a), (2, b), 或 (3, b)
- (2, a), (2, b), 或 (3, a)
- (2, a), (3, b), 或 (3, a)
- (2, a), (2, b), (3, b), 或 (3, a)

确 认

Round 16: Choose A Message

Your role has been randomly re-assigned.

Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Both you and the seller are now informed about the additional feature and the above payoff table. The feature is randomly chosen.

The feature of the object is: **a**

Which message would you choose to send to the buyer?

You can choose to be silent about the feature:

You can choose to mention the feature explicitly:

- 2
- 2 or 3

- (2, a)
- (2, a) or (2, b)
- (2, a) or (3, b)
- (2, a) or (3, a)
- (2, a), (2, b), or (3, b)
- (2, a), (2, b), or (3, a)
- (2, a), (3, b), or (3, a)
- (2, a), (2, b), (3, b), or (3, a)

Confirm

Results for the last round

Your assigned role: **SELLER**, the quality is **(2, a)**

The message you sent to the buyer: The quality is **(2, a), (2, b), (3, b)** or **(3, a)**

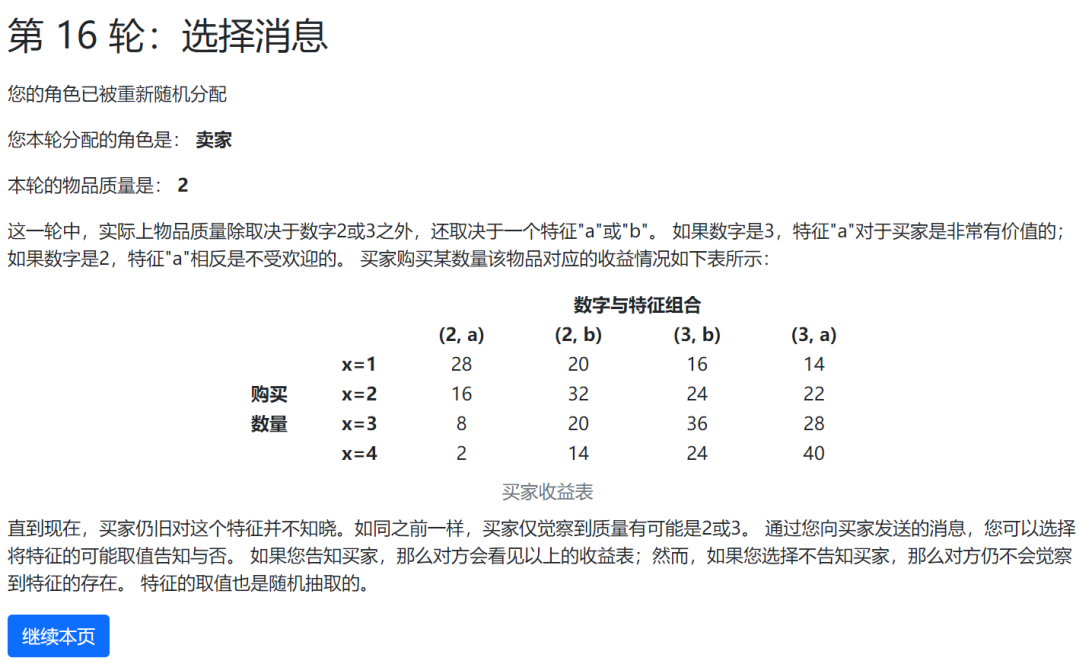
The number of units purchased by you is **3**.

The buyer purchased **1** unit.

Your payoff in the last round: **8 CNY**

Click to see your payment from the experiment

Screenshots for Treatment U, China Sample, Seller, Round 16



第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

直到现在，买家仍旧对这个特征并不知晓。如同之前一样，买家仅觉察到质量有可能是2或3。 通过您向买家发送的消息，您可以选择将特征的可能取值告知与否。 如果您告知买家，那么对方会看见以上的收益表；然而，如果您选择不告知买家，那么对方仍不会觉察到特征的存在。 特征的取值也是随机抽取的。

继续本页

Round 16: Choose A Message

Your role has been randomly re-assigned.

Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Continue

第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	**(2, b)**	**(3, b)**	**(3, a)**
购买数量	**x=1**	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

直到现在，买家仍旧对这个特征并不知晓。如同之前一样，买家仅觉察到质量有可能是2或3。 通过您向买家发送的消息，您可以选择将特征的可能取值告知与否。 如果您告知买家，那么对方会看见以上的收益表；然而，如果您选择不告知买家，那么对方仍不会觉察到特征的存在。 特征的取值也是随机抽取的。

物品随机抽取的的特征是： **a**

您想发送哪条消息给买家?

您可以选择对特征保持缄默：
- 2
- 2 或 3

您可以选择明显提及特征：
- (2, a)
- (2, a) 或 (2, b)
- (2, a) 或 (3, b)
- (2, a) 或 (3, a)
- (2, a), (2, b), 或 (3, b)
- (2, a), (2, b), 或 (3, a)
- (2, a), (3, b), 或 (3, a)
- (2, a), (2, b), (3, b), 或 (3, a)

确 认

Round 16: Choose A Message

Your role has been randomly re-assigned.

Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Till now the buyer has no idea about the possible special feature. As before (s)he is just aware of qualities 2 and 3. With your message to the buyer, you may or may not choose to inform the buyer about the possibility of the special feature. If you inform the buyer about the feature, then (s)he will also see this table. Otherwise if you choose not to inform the buyer about the feature, then (s)he will remain unaware of it. The feature is chosen randomly as well.

The feature of the object is: **a**

Which message would you choose to send to the buyer?

You can choose to be silent about the feature:

- 2
- 2 or 3

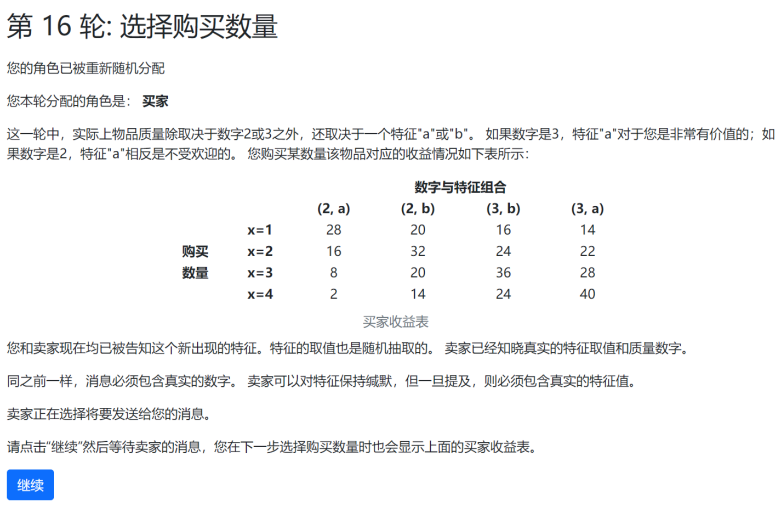
You can choose to mention the feature explicitly:

- (2, a)
- (2, a) or (2, b)
- (2, a) or (3, b)
- (2, a) or (3, a)
- (2, a), (2, b), or (3, b)
- (2, a), (2, b), or (3, a)
- (2, a), (3, b), or (3, a)
- (2, a), (2, b), (3, b), or (3, a)

Confirm

C.3 Screenshots for the China* Sample

Screenshots for Treatment A, China* Sample, Buyer, Round 16



第 16 轮: 选择购买数量

您的角色已被重新随机分配

您本轮分配的角色是： **买家**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于您是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 您购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

您和卖家现在均已被告知这个新出现的特征。特征的取值也是随机抽取的。 卖家已经知晓真实的特征取值和质量数字。

同之前一样，消息必须包含真实的数字。 卖家可以对特征保持缄默，但一旦提及，则必须包含真实的特征值。

卖家正在选择将要发送给您的消息。

请点击"继续"然后等待卖家的消息，您在下一步选择购买数量时也会显示上面的买家收益表。

继续

Round 16: Choose A Quantity to Purchase

Your role has been randomly re-assigned.

Your assigned role in this round is: **BUYER**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. Your payoff from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

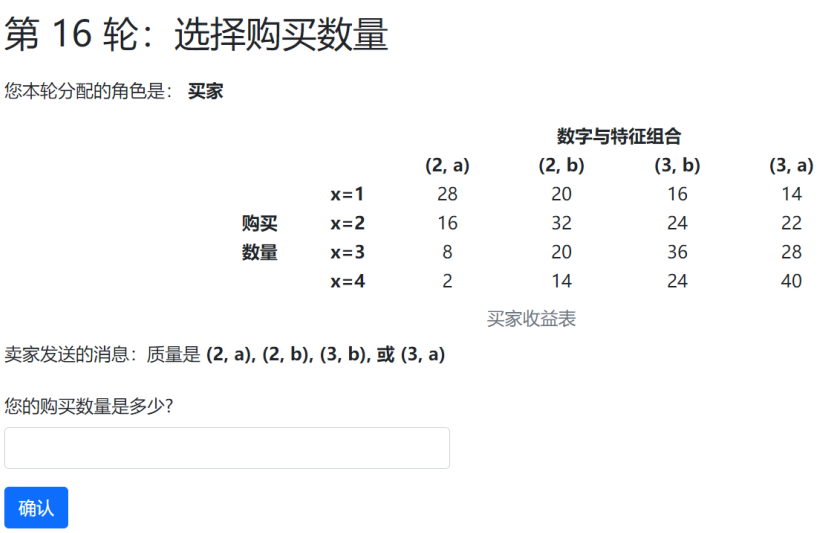
Both you and the seller are now informed about the additional feature and the above payoff table. The feature is randomly chosen. The seller has been informed which feature has been randomly chosen along with the randomly chosen number of quality.

As before, the message of the seller has to contain the true number. The seller can be silent on the feature but whenever (s)he mentions the feature in her/his message, it must contain the true feature.

The seller is now choosing the message to send to you.

Please click ”Continue” and wait for the seller’s message. The above payoff table will still show in the next step when you make your decision on quantity to purchase.

Continue



Round 16: Choose A Quantity to Purchase

Your assigned role in this round is: **BUYER**

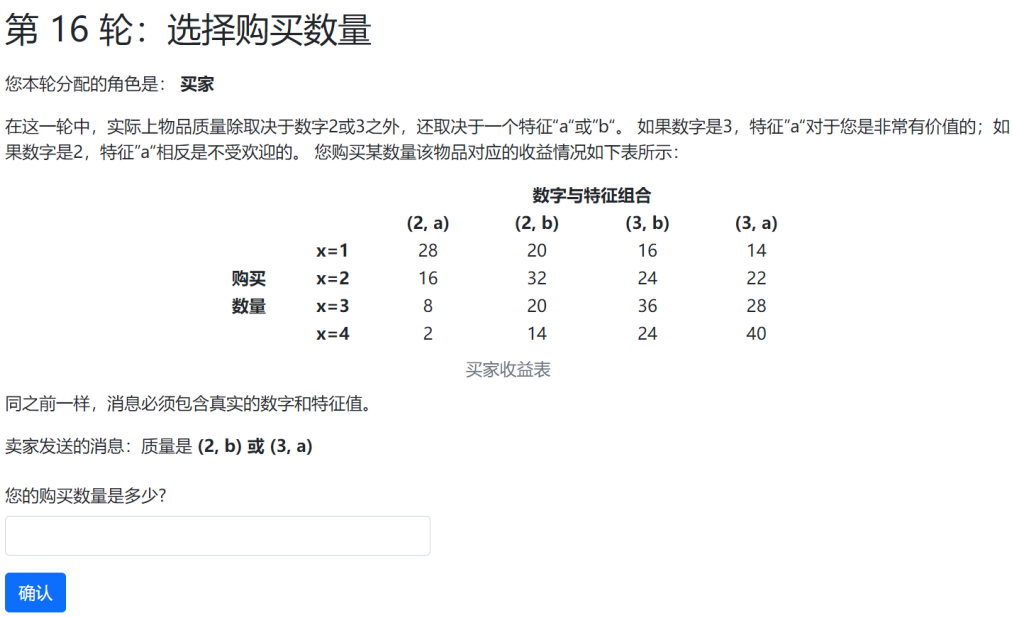
		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

The message sent by the seller: The quality **is (2, a), (2, b), (3, b) or (3, a)**

How many units would you like to purchase?

Confirm

Screenshots for Treatment U, China* Sample, Buyer, Round 16, After Seller Raised Awareness



第 16 轮：选择购买数量

您本轮分配的角色是： **买家**

在这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于您是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 您购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

同之前一样，消息必须包含真实的数字和特征值。

卖家发送的消息：质量是 **(2, b) 或 (3, a)**

您的购买数量是多少?

确认

Round 16: Choose A Quantity to Purchase

Your assigned role in this round is: **BUYER**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature "a" or "b". Feature "a" is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. Your payoff from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

As before, the message has to contain the true number.

The message sent by the seller: The quality is **(2, b)** or **(3, a)**

How many units would you like to purchase?

Confirm

Screenshots for Treatment A, China* Sample, Buyer, Round 16, After the Seller Does Not Raise Awareness

Round 16: Choose A Quantity to Purchase

Your assigned role in this round is: **BUYER**

The message sent by the seller: The quality is **2 or 3**

How many units would you like to purchase?

Confirm

上一轮的结果

您的角色是 **买家**

上一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。

如果质量是3，特征"a"对于您是非常有价值的；如果质量是2，特征"a"相反是不受欢迎的。

您购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

发送消息时，卖家可以选择让您觉察到这一特征的存在，但他（她）并没有这么做。

物品的真实质量是 **(2, b)**

您收到的来自于卖家的消息：质量是 **2 或 3**

您的购买数量是 **2** 单位

您上一轮的收益是：**32.00元**

查看实验报酬

Results of Last Round

Your role was: **Buyer**

It turns out that besides having either 2 or 3, the quality of the object also depends on a feature "a" or "b".

Feature "a" is very valuable to you if the quality is 3 but undesirable if the quality is 2.

The payoff to you from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

The seller had the option to make you aware of this special feature when sending the message. (S)He chose not to do so.

The true quality of the object is: **(2, b)**

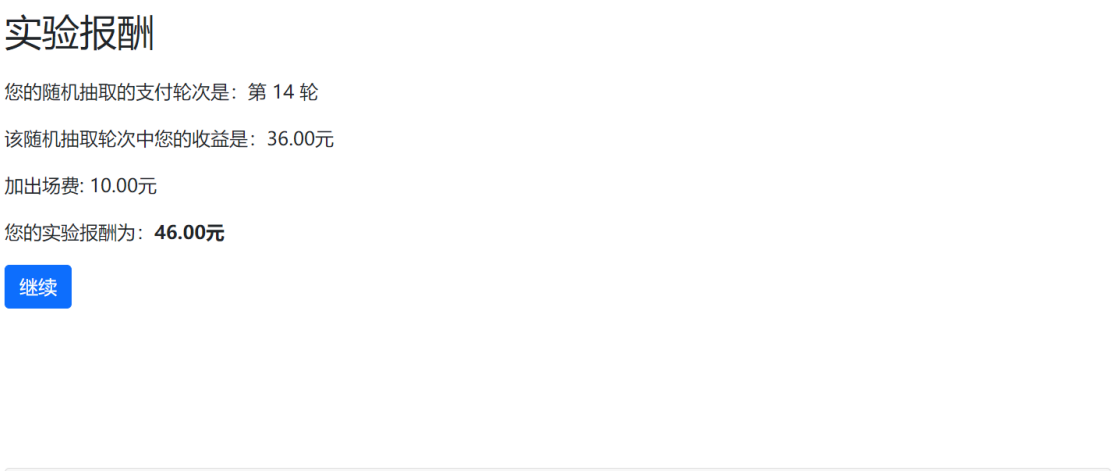
The message you received from the seller: The quality is **2 or 3**

The number of units you purchased: 2

Your payoff for last round: **32 CNY**

Click to see your payment from the experiment

Final Payment Screen, China and China* Samples



Your payment from the experiment

The random chosen round is: Round 14

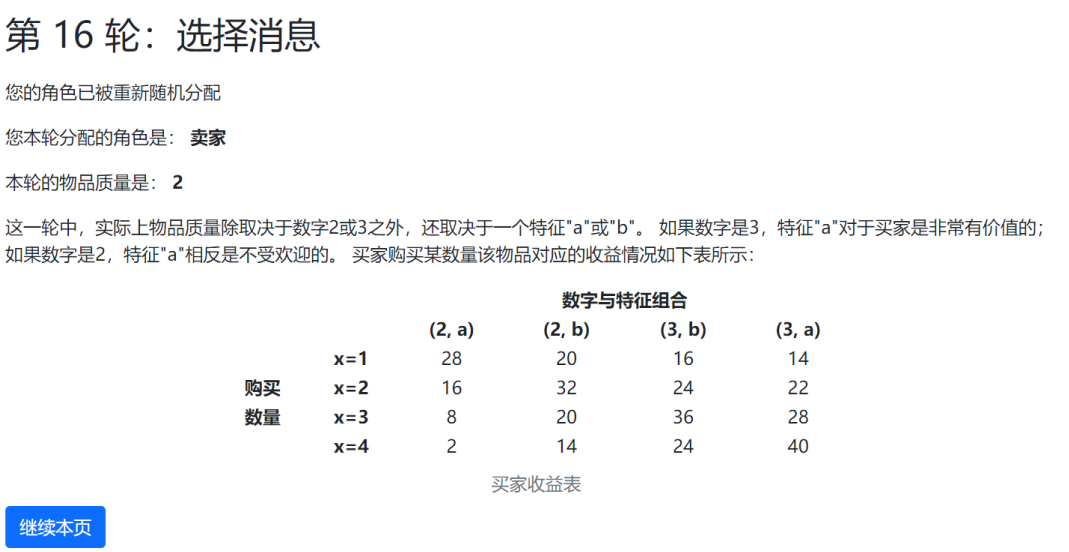
Your payoff from the random chosen round is: 36 CNY

Plus the participation fee: 10 CNY

Your payment from the experiment is: **40 CNY**

Continue

Screenshots for Treatment A, China* Sample, Seller, Round 16



第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

继续本页

Round 16: Choose A Message

Your role has been randomly re-assigned.

Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Continue

第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	**(2, b)**	**(3, b)**	**(3, a)**
	x=1	28	20	16	14
购买	**x=2**	16	32	24	22
数量	**x=3**	8	20	36	28
	x=4	2	14	24	40

买家收益表

您和买家现在均已被告知这个新出现的特征和以上的收益表。特征的取值也是随机抽取的。

物品随机抽取的的特征是： **a**

同之前一样，消息必须包含真实的数字。您可以对特征保持缄默，但一旦提及，则必须包含真实的特征值。

您想发送哪条消息给买家?

您可以选择对特征保持缄默：
- ○ 2
- ○ 2 或 3

您可以选择明显提及特征：
- ○ (2, a)
- ○ (2, a) 或 (2, b)
- ○ (2, a) 或 (3, b)
- ○ (2, a) 或 (3, a)
- ○ (2, a), (2, b), 或 (3, b)
- ○ (2, a), (2, b), 或 (3, a)
- ○ (2, a), (3, b), 或 (3, a)
- ○ (2, a), (2, b), (3, b), 或 (3, a)

确认

Round 16: Choose A Message

Your role has been randomly re-assigned.

Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Both you and the seller are now informed about the additional feature and the above payoff table. The feature is randomly chosen.

The feature of the object is: **a**

As before, the message of the seller has to contain the true number. You can be silent on the feature but whenever the feature is mentioned, it must contain the true feature.

Which message would you choose to send to the buyer?

You can choose to be silent about the feature:

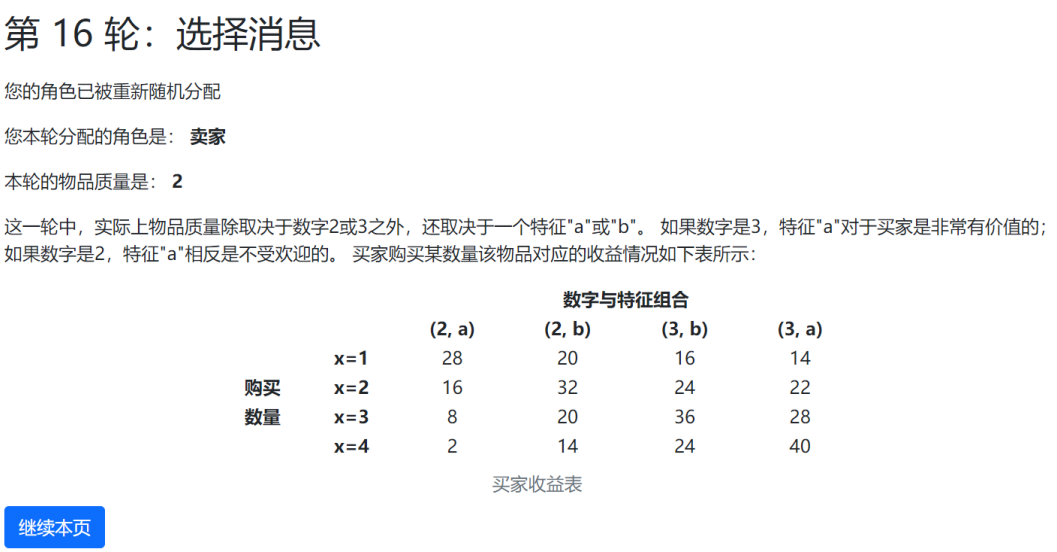
- 2
- 2 or 3

You can choose to mention the feature explicitly:

- (2, a)
- (2, a) or (2, b)
- (2, a) or (3, b)
- (2, a) or (3, a)
- (2, a), (2, b), or (3, b)
- (2, a), (2, b), or (3, a)
- (2, a), (3, b), or (3, a)
- (2, a), (2, b), (3, b), or (3, a)

Confirm

Screenshots for Treatment U, China* Sample, Seller, Round 16



第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

继续本页

Round 16: Choose A Message

Your role has been randomly re-assigned.

Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Continue

第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	**(2, b)**	**(3, b)**	**(3, a)**
购买数量	**x=1**	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

直到现在，买家仍旧对这个特征并不知晓。如同之前一样，买家仅觉察到质量有可能是2或3。

通过您向买家发送的消息，您可以选择将特征的可能取值告知与否。

如果您告知买家，那么对方会看见以上的收益表；然而，如果您选择不告知买家，那么对方仍不会觉察到特征的存在。 特征的取值也是随机抽取的。

物品随机抽取的的特征是： **b**

继续本页

Round 16: Choose A Message

Your role has been randomly re-assigned.

Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Till now the buyer has no idea about the possible special feature. As before (s)he is just aware of qualities 2 and 3.

With your message to the buyer, you may or may not choose to inform the buyer about the possibility of the special feature.

If you inform the buyer about the feature, then (s)he will also see this table. Otherwise if you choose not to inform the buyer about the feature, then (s)he will remain unaware of it. The feature is chosen randomly as well.

The feature of the object is: **b**

Continue

第 16 轮：选择消息

您的角色已被重新随机分配

您本轮分配的角色是： **卖家**

本轮的物品质量是： **2**

这一轮中，实际上物品质量除取决于数字2或3之外，还取决于一个特征"a"或"b"。 如果数字是3，特征"a"对于买家是非常有价值的；如果数字是2，特征"a"相反是不受欢迎的。 买家购买某数量该物品对应的收益情况如下表所示：

		数字与特征组合			
		(2, a)	(2, b)	(3, b)	(3, a)
购买数量	x=1	28	20	16	14
	x=2	16	32	24	22
	x=3	8	20	36	28
	x=4	2	14	24	40

买家收益表

直到现在，买家仍旧对这个特征并不知晓。如同之前一样，买家仅觉察到质量有可能是2或3。

通过您向买家发送的消息，您可以选择将特征的可能取值告知与否。

如果您告知买家，那么对方会看见以上的收益表；然而，如果您选择不告知买家，那么对方仍不会觉察到特征的存在。 特征的取值也是随机抽取的。

物品随机抽取的的特征是： **b**

同之前一样，消息必须包含真实的数字。您可以对特征保持缄默，但一旦提及，则必须包含真实的特征值。

您想发送哪条消息给买家?

您可以选择对特征保持缄默：
- 2
- 2 或 3

您也可以选择明显提及特征：
- (2, b)
- (2, a) 或 (2, b)
- (2, b) 或 (3, b)
- (2, b) 或 (3, a)
- (2, a), (2, b), 或 (3, b)
- (2, a), (2, b), 或 (3, a)
- (2, b), (3, b), 或 (3, a)
- (2, a), (2, b), (3, b), 或 (3, a)

确 认

Round 16: Choose A Message

Your role has been randomly re-assigned.

Your assigned role in this round is: **SELLER**

The quality of the object in this round is: **2**

It turns out that besides having either quality 2 or 3. In this round the quality of the object also depends on a feature “a” or “b”. Feature “a” is very valuable to you if the quality is 3 but highly undesirable if the quality is 2. The payoff to the buyer from purchasing a certain quantity is given in the following table:

		Combination of number and feature			
		(2, a)	(2, b)	(3, b)	(3, a)
Quantity to purchase	X=1	28	20	16	14
	X=2	16	32	24	22
	X=3	8	20	36	28
	X=4	2	14	24	40

Till now the buyer has no idea about the possible special feature. As before (s)he is just aware of qualities 2 and 3.

With your message to the buyer, you may or may not choose to inform the buyer about the possibility of the special feature.

If you inform the buyer about the feature, then (s)he will also see this table. Otherwise if you choose not to inform the buyer about the feature, then (s)he will remain unaware of it. The feature is chosen randomly as well.

The feature of the object is: **b**

As before, the message has to contain the true number. You can be silent on the feature but whenever the feature is mentioned, it must contain the true feature.

Which message would you choose to send to the buyer?

You can choose to be silent about the feature:

- 2
- 2 or 3

You can choose to mention the feature explicitly:

- (2, b)
- (2, a) or (2, b)
- (2, b) or (3, b)
- (2, b) or (3, a)
- (2, a), (2, b), or (3, b)
- (2, a), (2, b), or (3, a)
- (2, b), (3, b), or (3, a)
- (2, a), (2, b), (3, b), or (3, a)

Confirm