

Exam 3

Name: _____

Darion and Jessie are dreaming about their new apartment, especially the furnishings for their room. They made a top 5 list and marked the highest price they'd be willing to pay for each item, but Darion and Jessie only find a few items when they shop separately.

| Highest Price | Big Mirror | Storage Bin | Alarm Clock | Trash Can | Drawers |
|---------------|------------|-------------|-------------|-----------|---------|
| Darion | \$15 | \$15 | \$20 | \$10 | \$40 |
| Jessie | \$30 | \$25 | \$15 | \$1 | \$25 |

a. Darion bought a nice Big Mirror and Jessie had a \$20 bill. Explain why they might both be happy trading the Big Mirror for the money.

b. Darion bought a nice Storage Bin and Jessie bought an Alarm Clock. Would they both be happy trading?

c. Darion bought a Trash Can, and Jessie bought a set of Drawers. Explain why Jessie would not be happy just trading.

d. How much would Darion need to pay Jessie to make the trade happen? Would Darion still want the trade at that price? *(So Jessie gets money and the Trash Can but loses the set of Drawers; Darion loses money and the Trash Can but gains the set of Drawers.)*

2. Avery and Chandler are looking at a 2-bedroom apartment for \$500 per month plus the cable bill. They are trying to come to a rental agreement where they choose rooms, choose a cable plan, divvy up the chores, and split the rent. They are ok splitting things “unevenly” as long as both (i) Avery thinks Avery is getting more than Avery is paying for, and (ii) Chandler thinks Chandler is getting more than Chandler is paying for.

| | Front | Back | Regular | Reg+Premium | Living | Kitchen |
|----------|-------------|-------|---------|-------------|--------|---------|
| Avery | \$300 | \$230 | \$10 | \$20 | \$ 5 | \$20 |
| Chandler | \$260 | \$220 | \$10 | \$25 | \$10 | \$ 5 |
| Cost | \$500 total | | \$45 | \$45+\$50 | | |

The rooms look the same to you, but Avery likes the Front room better because of the view, and Chandler likes the Front room better because it has a nicer closet. If forced to put a number on it, Avery would pay \$300 for the Front room and \$230 for the Back room, while Chandler would pay \$260 for the Front room and \$220 for the Back room.

(a) Who should get which room? Explain why.

Avery and Chandler are considering Cable for \$45 a month and Premium Cable for an extra \$50 per month (and it requires regular cable). Avery would be happy paying anything less than \$10 for regular cable, but would personally pay up to \$20 (total) per month to have both regular cable and premium cable together. Chandler also is only willing to pay \$10 for regular cable, and would go up to \$25 (total) per month for both.

(b) Should they get premium cable, just regular cable, or no cable at all? Explain why.

They are also nervous about who cleans the main room and who cleans the kitchen. Avery would pay Chandler \$5 a month to take care of the living room and \$20 a month to take care of the kitchen. On the other hand, if Avery is forced to do the living room, that's \$5 a month, and \$20 a month if forced to clean the kitchen. Chandler's prices are \$10 a month for the living room and \$5 a month for the kitchen. *(Either Avery pays Chandler to clean them, or for Chandler to pay Avery to clean them.)*

(c) Who should clean the living room? Who should clean the kitchen? Explain why.

Assume Avery gets the Front room and has to clean the living room, Chandler gets the Back room and has to clean the kitchen, and together they get regular cable but not premium.

(d) What is the most Avery is willing to pay a month for this arrangement?

(e) What is the most Chandler is willing to pay a month for this arrangement?

(f) Is it enough?

(g) Can you do better?

3. Essays. Pick one, and explain your thoughts clearly.

(a) Bryan happily pays \$8 a month for standard definition Netflix streaming on one screen. Gabe points out that for only \$1 more, Bryan could get high definition streaming one two screens simultaneously. In fact, Gabe is willing to pay that extra dollar in exchange for one of those screens. Bryan instinctively says no way. Gabe offers to pay \$3 per month for the screen. So right now Bryan pays \$8 a month for a single standard def screen, but with Gabe's deal Bryan would pay \$6 per month ($\$8 + \$1 - \3) for a single high definition screen and Gabe would pay \$3 per month for the same thing.

(We can assume Bryan agrees that high definition is better than standard definition, especially since he can just select standard definition in preferences in order to turn it off. We can also assume Netflix thinks their deal is legit.)

Should Bryan accept Gabe's deal?

(b) Darion wouldn't pay more than \$100 for a phone. In other words, Darion would rather have \$100 than a new phone. Avery offers to buy Darion's phone for \$200.

Explain why it sounds like Darion should accept the deal. In a second paragraph, explain why Darion might not like the deal.

Exam 3

Name: _____

Jackie and Darian are dreaming about their new apartment, especially the furnishings for their room. They made a top 5 list and marked the highest price they'd be willing to pay for each item, but Jackie and Darian only find a few items when they shop separately.

| Highest Price | Big Mirror | Storage Bin | Alarm Clock | Trash Can | Drawers |
|---------------|------------|-------------|-------------|-----------|---------|
| Jackie | \$15 | \$15 | \$20 | \$14 | \$30 |
| Darian | \$30 | \$20 | \$15 | \$8 | \$25 |

a. Jackie bought a nice Big Mirror and Darian had a \$20 bill. Explain why they might both be happy trading the Big Mirror for the money.

b. Jackie bought a nice Storage Bin and Darian bought an Alarm Clock. Would they both be happy trading?

c. Jackie bought a Trash Can, and Darian bought a set of Drawers. Explain why Darian would not be happy just trading.

d. How much would Jackie need to pay Darian to make the trade happen? Would Jackie still want the trade at that price? *(So Darian gets money and the Trash Can but loses the set of Drawers; Jackie loses money and the Trash Can but gains the set of Drawers.)*

2. Chris and Jordan are looking at a 2-bedroom apartment for \$500 per month plus the cable bill. They are trying to come to a rental agreement where they choose rooms, choose a cable plan, divvy up the chores, and split the rent. They are ok splitting things “unevenly” as long as both (i) Chris thinks Chris is getting more than Chris is paying for, and (ii) Jordan thinks Jordan is getting more than Jordan is paying for.

| | Front | Back | Regular | Reg+Premium | Living | Kitchen |
|--------|-------------|-------|---------|-------------|--------|---------|
| Chris | \$260 | \$300 | \$30 | \$40 | \$ 5 | \$20 |
| Jordan | \$190 | \$260 | \$30 | \$45 | \$10 | \$ 5 |
| Cost | \$500 total | | \$45 | \$45+\$50 | | |

The rooms look the same to you, but Chris likes the Back room better because of the view, and Jordan likes the Back room better because it has a nicer closet. If forced to put a number on it, Chris would pay \$260 for the Front room and \$300 for the Back room, while Jordan would pay \$190 for the Front room and \$260 for the Back room.

(a) Who should get which room? Explain why.

Chris and Jordan are considering Cable for \$45 a month and Premium Cable for an extra \$50 per month (and it requires regular cable). Chris would be happy paying anything less than \$30 for regular cable, but would personally only pay up to \$40 (total) per month to have both regular cable and premium cable together. Jordan also is only willing to pay \$30 for regular cable, and would go up to \$45 (total) per month for both.

(b) Should they get premium cable, just regular cable, or no cable at all? Explain why.

They are also nervous about who cleans the main room and who cleans the kitchen. Chris would pay Jordan \$5 a month to take care of the living room and \$20 a month to take care of the kitchen. On the other hand, if Chris is forced to do the living room, that's \$5 a month, and \$20 a month if forced to clean the kitchen. Jordan's prices are \$10 a month for the living room and \$5 a month for the kitchen. *(Either Chris pays Jordan to clean them, or for Jordan to pay Chris to clean them.)*

(c) Who should clean the living room? Who should clean the kitchen? Explain why.

Assume Chris gets the Back room and has to clean the living room, Jordan gets the Front room and has to clean the kitchen, and together they get both regular cable and premium cable.

(d) What is the most Chris is willing to pay a month for this arrangement?

(e) What is the most Jordan is willing to pay a month for this arrangement?

(f) Is it enough?

(g) Can you do better?

3. Essays. Pick one, and explain your thoughts clearly.

(a) Bryan happily pays \$8 a month for standard definition Netflix streaming on one screen. Gabe points out that for only \$1 more, Bryan could get high definition streaming one two screens simultaneously. In fact, Gabe is willing to pay that extra dollar in exchange for one of those screens. Bryan instinctively says no way. Gabe offers to pay \$3 per month for the screen. So right now Bryan pays \$8 a month for a single standard def screen, but with Gabe's deal Bryan would pay \$6 per month ($\$8 + \$1 - \3) for a single high definition screen and Gabe would pay \$3 per month for the same thing. *(We can assume Bryan agrees that high definition is better*

than standard definition, especially since he can just select standard definition in preferences in order to turn it off. We can also assume Netflix thinks their deal is legit.)

Should Bryan accept Gabe's deal?

(b) Jackie wouldn't pay more than \$100 for a phone. In other words, Jackie would rather have \$100 than a new phone. Chris offers to buy Jackie's phone for \$200.

Explain why it sounds like Jackie should accept the deal. In a second paragraph, explain why Jackie might not like the deal.

Exam 3

Name: _____

Darien and Jaime are dreaming about their new apartment, especially the furnishings for their room. They made a top 5 list and marked the highest price they'd be willing to pay for each item, but Darien and Jaime only find a few items when they shop separately.

| Highest Price | Big Mirror | Storage Bin | Alarm Clock | Trash Can | Drawers |
|---------------|------------|-------------|-------------|-----------|---------|
| Darien | \$30 | \$30 | \$20 | \$12 | \$30 |
| Jaime | \$15 | \$20 | \$15 | \$10 | \$25 |

a. Darien bought a nice Big Mirror and Jaime had a \$20 bill. Explain why they might both be unhappy trading the Big Mirror for the money.

b. Darien bought a nice Storage Bin and Jaime bought an Alarm Clock. Would they both be happy trading?

c. Darien bought a Trash Can, and Jaime bought a set of Drawers. Explain why Jaime would not be happy just trading.

d. How much would Darien need to pay Jaime to make the trade happen? Would Darien still want the trade at that price? *(So Jaime gets money and the Trash Can but loses the set of Drawers; Darien loses money and the Trash Can but gains the set of Drawers.)*

2. Taylor and Casey are looking at a 2-bedroom apartment for \$500 per month plus the cable bill. They are trying to come to a rental agreement where they choose rooms, choose a cable plan, divvy up the chores, and split the rent. They are ok splitting things “unevenly” as long as both (i) Taylor thinks Taylor is getting more than Taylor is paying for, and (ii) Casey thinks Casey is getting more than Casey is paying for.

| | Front | Back | Regular | Reg+Premium | Living | Kitchen |
|--------|-------------|-------|---------|-------------|--------|---------|
| Casey | \$190 | \$260 | \$15 | \$55 | \$10 | \$15 |
| Taylor | \$260 | \$300 | \$15 | \$60 | \$20 | \$25 |
| Cost | \$500 total | | \$45 | \$45+\$50 | | |

The rooms look the same to you, but Casey likes the Back room better because of the view, and Taylor likes the Back room better because it has a nicer closet. If forced to put a number on it, Casey would pay \$190 for the Front room and \$260 for the Back room, while Taylor would pay \$260 for the Front room and \$300 for the Back room.

(a) Who should get which room? Explain why.

Casey and Taylor are considering Cable for \$45 a month and Premium Cable for an extra \$50 per month (and it requires regular cable). Casey would be happy paying anything less than \$15 for regular cable, and would pay up to \$55 (total) per month to have both regular cable and premium cable together. Taylor also is only willing to pay \$15 for regular cable, but would go up to \$60 (total) per month for both regular and premium.

(b) Should they get premium cable, just regular cable, or no cable at all? Explain why.

They are also nervous about who cleans the main room and who cleans the kitchen. Casey would pay Taylor \$10 a month to take care of the living room and \$15 a month to take care of the kitchen. On the other hand, if Casey is forced to do the living room, that's \$10 a month that Casey expects off their rent, and \$15 a month if forced to clean the kitchen. Taylor's prices are \$20 a month for the living room and \$25 a month for the kitchen. *(Either*

Casey pays Taylor to clean them, or for Taylor to pay Casey to clean them.)

(c) Who should clean the living room? Who should clean the kitchen? Explain why.

Assume Casey gets the Front room and has to clean the living room, Taylor gets the Back room and has to clean the kitchen, and together they get both regular cable and premium cable.

(d) What is the most Casey is willing to pay a month for this arrangement?

(e) What is the most Taylor is willing to pay a month for this arrangement?

(f) Is it enough?

(g) Can you do better?

3. Essays. Pick one, and explain your thoughts clearly.

(a) Bryan happily pays \$8 a month for standard definition Netflix streaming on one screen. Gabe points out that for only \$1 more, Bryan could get high definition streaming one two screens simultaneously. In fact, Gabe is willing to pay that extra dollar in exchange for one of those screens. Bryan instinctively says no way. Gabe offers to pay \$3 per month for the screen. So right now Bryan pays \$8 a month for a single standard def screen, but with Gabe's deal Bryan would pay \$6 per month ($\$8 + \$1 - \3) for a single high definition screen and Gabe would pay \$3 per month for the same thing.

(We can assume Bryan agrees that high definition is better than standard definition, especially since he can just select standard definition in preferences in order to turn it off. We can also assume Netflix thinks their deal is legit.)

Should Bryan accept Gabe's deal?

(b) Darien wouldn't pay more than \$100 for a phone. In other words, Darien would rather have \$100 than a new phone. Taylor offers to buy Darien's phone for \$200.

Explain why it sounds like Darien should accept the deal. In a second paragraph, explain why Darien might not like the deal.