# Solution to Three Discrimination Problems

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# Three Discrimination Problems

- Joe's Barber Shop
- Ethyl's Bar and Grill
- Fred's House of Pancakes

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# Joe's Barber Shop

- Joe's Barber Shop is located in a quiet Cleveland Suburb. Joe's customers either
  - Work in downtown Cleveland and home mainly on the weekends, or are
  - Residents of Happy Days Retirement Home.

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# Joe's Barber Shop

|  | Weekdays | Saturday |
|---|---|---|
| Commuters | $8 | $15 |
| Denizens of Happy Days | $6 | $6 |

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# Joe's Barber Shop

|  | Weekdays | Saturday |
|---|---|---|
| Commuters | $8 | $15 |
| Denizens of Happy Days | $6 | $6 |

What price should Joe charge weekdays? Saturday?

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# Joe's Barber Shop

|  | Weekdays | Saturday |
|---|---|---|
| Commuters | $6 $8 | $15 |
| Denizens of Happy Days | $6 $6 | $6 |

The most he can get from the Happy Days residents is $6. Clearly he wants them to come on weekdays, so the weekday price is $6

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**Slide 1: Joe's Barber Shop**

I assume Joe must price in quarters. No $12.99

| | Weekdays | Saturday |
|---|---|---|
| Commuters | $6 $8 | $12.75 $15 |
| Denizens of Happy Days | $6 $6 | $12.75 $6 |

If Commuters come Weekdays, they will get Consumer Surplus of $2. He must leave them $2.25 on weekends to get them to shift. Hence $12.75

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**Slide 2: Ethyl's Bar and Grill**

- Ethyl's Bar and Grill has two types of customers. Their demand functions for drinks are

$$Q = 12- 2p$$

and

$$Q = 24-3p.$$

- While Ethyl cannot tell the two types apart, she can prevent arbitrage.
- Devise a pricing system (MC = 0).

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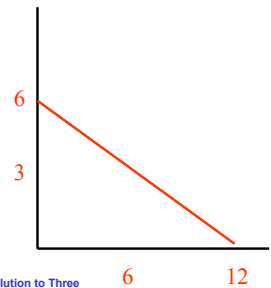
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**Slide 3: Ethyl's Bar and Grill**

**The Red Plan**
- Membership fee of $9
- $3.00 a drink

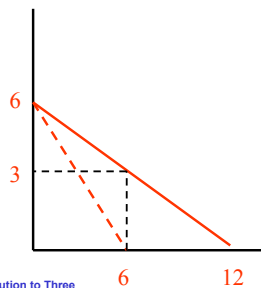**The Blue Plan**
- Membership fee of $67.49
- Free Drinks

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**Slide 4: Ethyl's Bar and Grill**

**The Red Plan**



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**Slide 5: Ethyl's Bar and Grill**

**The Red Plan**
- Profit Maximizing price is $3



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**Slide 6: Ethyl's Bar and Grill**

**The Red Plan**
- Profit Maximizing price is $3
- Consumer Surplus is $9



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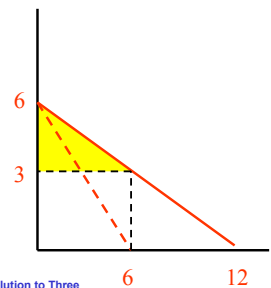
## Ethyl's Bar and Grill

**The Red Plan**
- Profit Maximizing price is $3
- Consumer Surplus is $9
- Get both
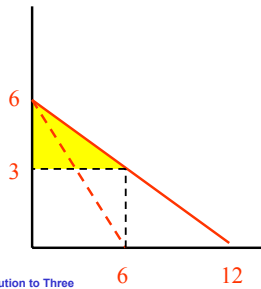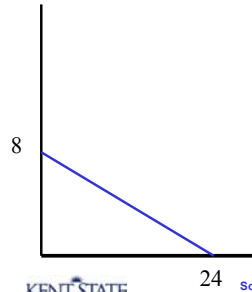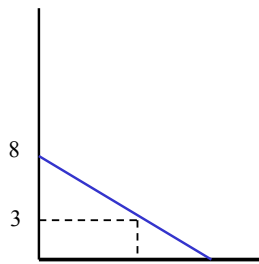
6

3

6    12

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## Ethyl's Bar and Grill

**The Blue Plan**

8

24

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## Ethyl's Bar and Grill

**The Blue Plan**

8

3

15    24

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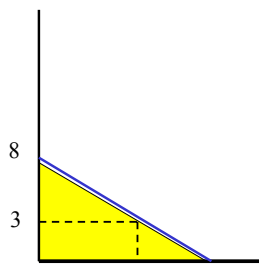## Ethyl's Bar and Grill

**The Blue Plan**
- Using the Red Plan, consumers get CS = $37.50- $9 = $28.50

8

3

15    24

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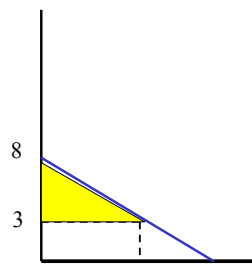
## Ethyl's Bar and Grill

**The Blue Plan**
- Using the Red Plan, consumers get CS = $37.50- $9 = $28.50
- Free drinks means CS = $96.

8

3

15    24

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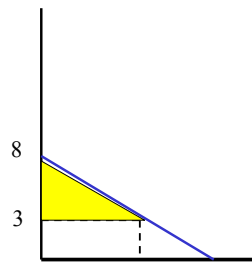
## Ethyl's Bar and Grill

**The Blue Plan**
- Using the Red Plan, consumers get CS = $37.50- $9 = $28.50
- Free drinks means CS = $96.
- We must leave them $28.51, so set fee at
  *$96 - $28.51 = $67.49*

8

3

15    24

## Fred's House of Pancakes

- Fred has pancake houses in Seattle and Youngstown, Ohio. The demand functions for pancakes are

**Seattle**

$Q = 100-10P$

**Youngstown**

$Q = 80 – 20 P$

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## Fred's House of Pancakes

- Fred has pancake houses in Seattle and Youngstown, Ohio. The demand functions for pancakes are

**Seattle**

$Q = 100-10P$

**Youngstown**

$Q = 80 – 20 P$

- MC = 0.
- What price should Fred charge if the Uniform Pancake Pricing Act (UPPA) becomes law?
- What prices should Fred charge otherwise?

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## Fred's House of Pancakes

**UPPA**

**Seattle**

$Q = 100-10P$

**Youngstown**

$Q = 80 – 20 P$

**Total**

$Q – 180-30P$



90    180

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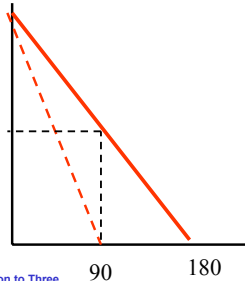
## Fred's House of Pancakes

**UPPA**

- **Price at $3**



$3

90    180

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## Fred's House of Pancakes



$4

$2

40    80

$10

$5

50    100

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## End