

# Overview of Lecture

- Still more on "Anchoring"
- Marketing Channels ("Place" in 4 Ps)
- Pricing
  - 3 different pricing models
  - 2 truthful elicitation procedures
  - In class 2nd price auction
  - demand curves &  $p^*$
  - price discrimination
  - price promotions
  - product bundling

Estimate the product

$$1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8 = \text{?????}$$

$$8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = \text{?????}$$

# Anchoring on initial impressions alters interpretation of later information

**Intelligent – Industrious – Impulsive – Critical – Stubborn – Envious**

**Envious – Stubborn – Critical – Impulsive – Industrious – Intelligent**

# Anchoring in market research

Would you pay \$25? YES NO

How much would you pay? \_\_\_\_\_

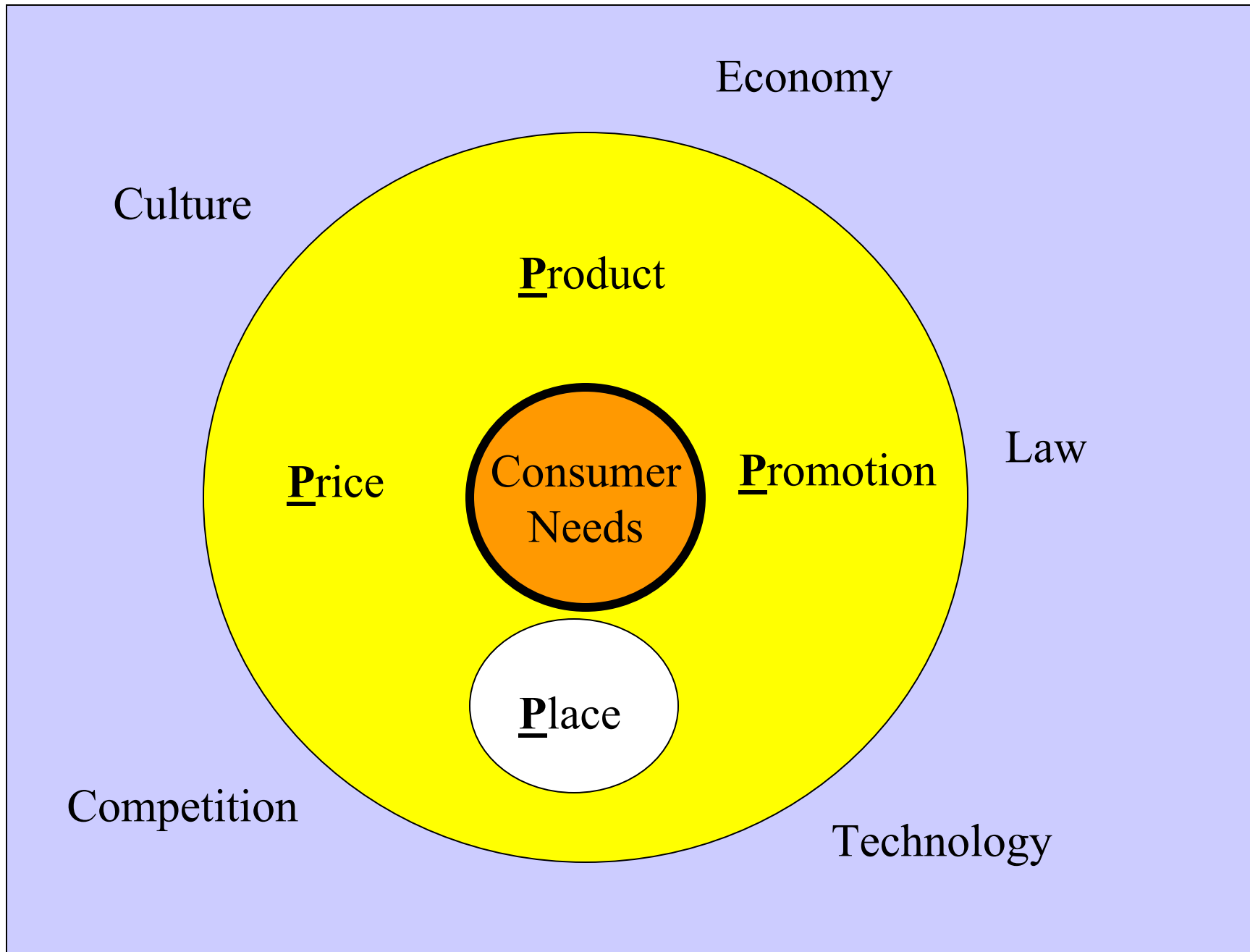
Would you pay \$200? YES NO

How much would you pay? \_\_\_\_\_

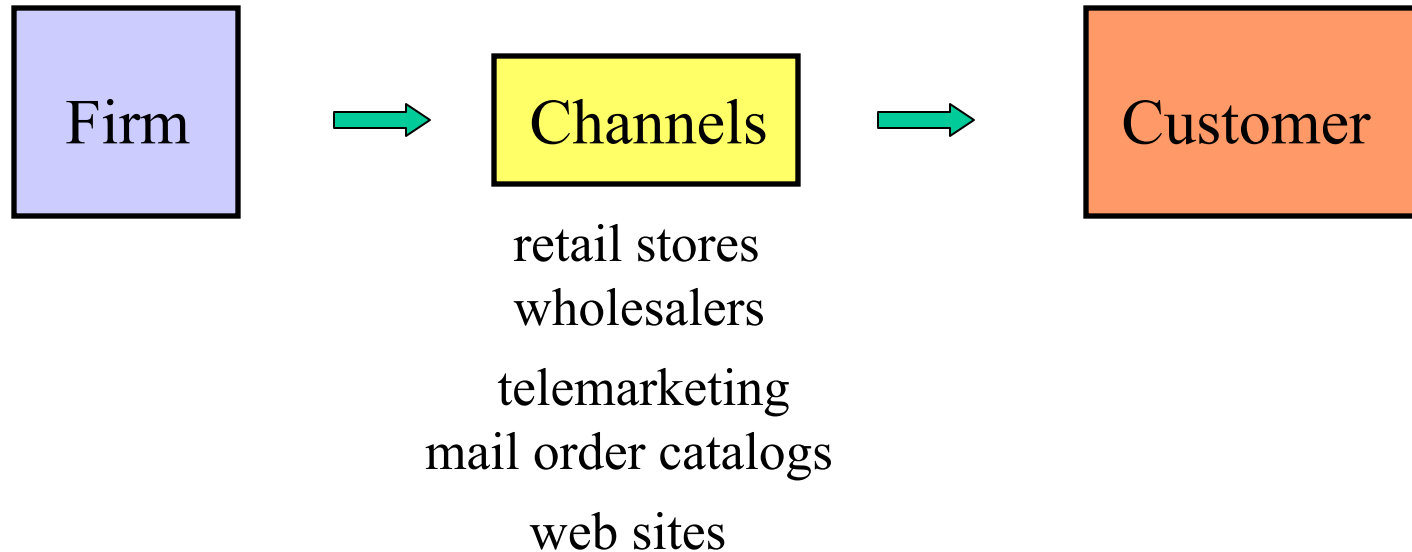
# More anchoring in marketing

How much would you expect to pay for all these products?....\$100?..... Well now, in this limited one time offer, you can get the entire set of Ginzu knives, Oxy 2000, and miracle brush for only \$19.95!!!! But wait, there's more.....

- Anchoring
- Scarcity
- Segregation
- Psychophysics



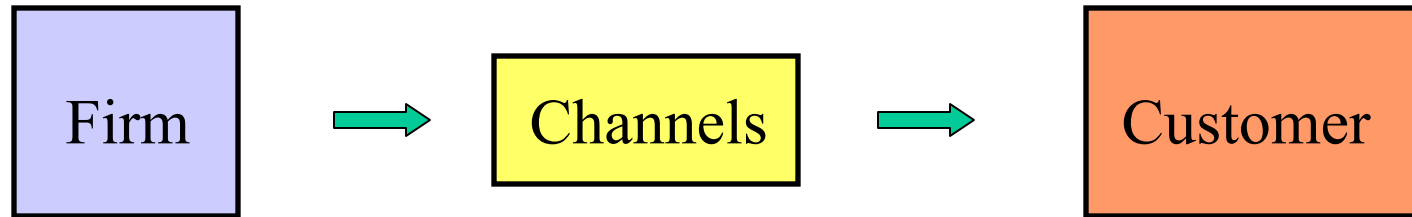
# Marketing Channels



"Push" : getting channels to carry your product

"Pull" : getting consumers to ask for your product by name

# Marketing Channels



"*Captive Channels*" : channels owned by firm

"*Non-Captive Channels*" : channels **not** owned by firm

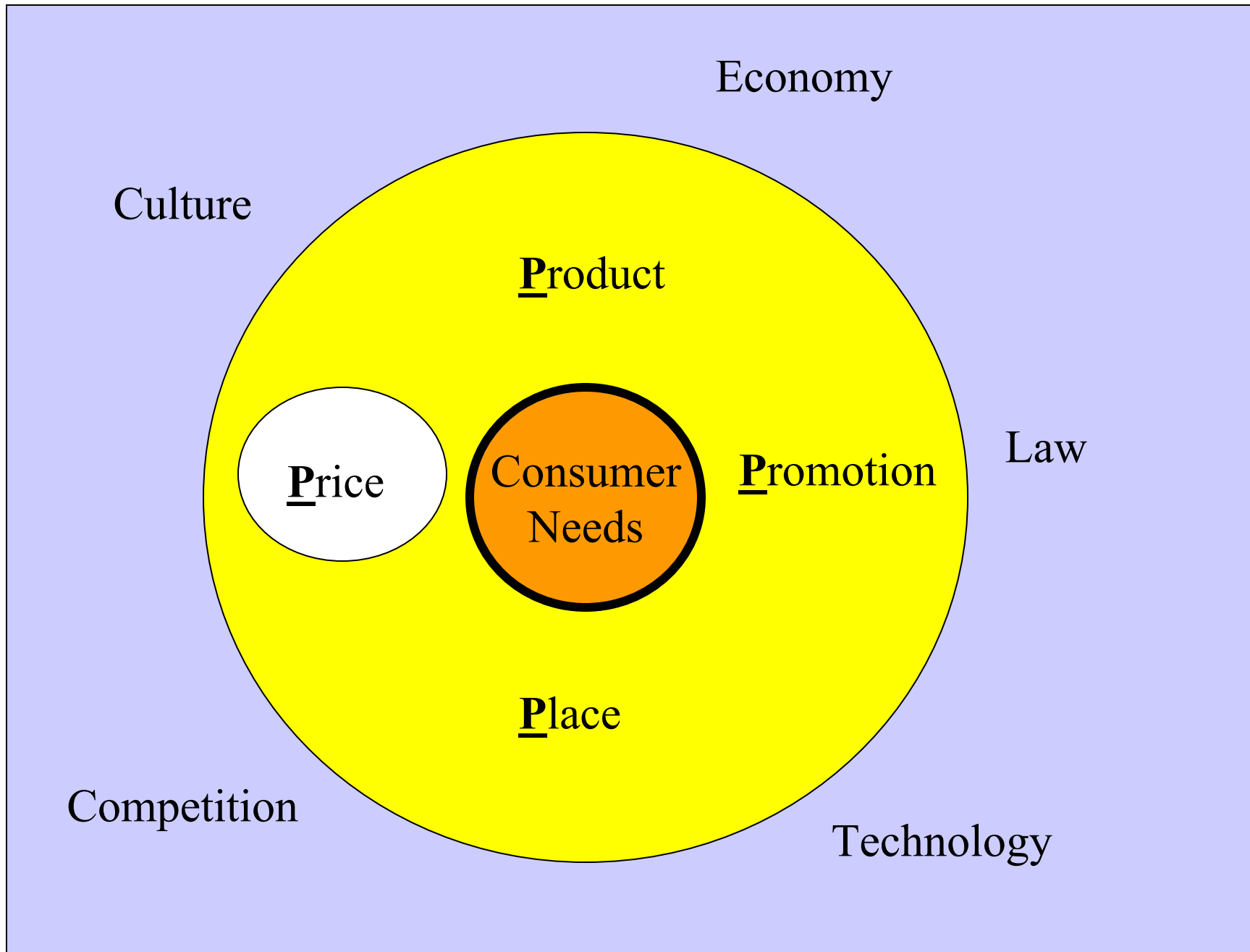
"When do retailers have "**channel power**"?"

- firm's product is not well differentiated from competitors
- threat of backward integration (e.g. *Shaw's* cola)

# Channel Conflict: the Internet



- "free – riding" by internet channel
- customers who use more than one channel get confused
  - return policies
  - origin of merchandise
  - different prices



Economy

Culture

Product

Price

Consumer  
Needs

Promotion

Law

Place

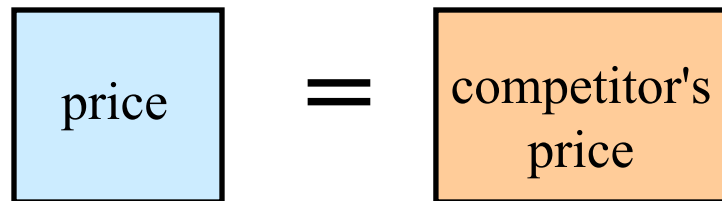
Competition

Technology

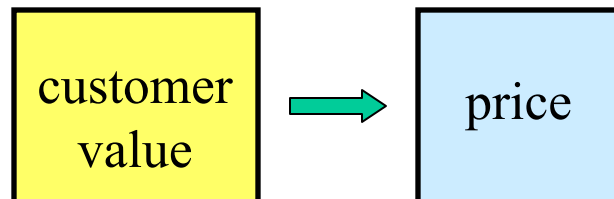
# Cost based pricing



# Competition based pricing



# Value based pricing



# Eliciting Consumer Values

**What is the most you would pay for "X"?**

- Two problems to overcome
  - Hypothetical bias
  - Strategic bias
    - Becker Deegroot Marshak procedure
    - 2<sup>nd</sup> Price auctions

# Becker, DeGroot, Marshak truthful elicitation procedure

(1) \$ 1.00	<input checked="" type="radio"/> YES	<input type="radio"/> NO
(2) \$ 2.00	<input checked="" type="radio"/> YES	<input type="radio"/> NO
(3) \$ 3.00	<input checked="" type="radio"/> YES	<input type="radio"/> NO
(4) \$ 4.00	<input checked="" type="radio"/> YES	<input type="radio"/> NO
(5) \$ 5.00	<input type="radio"/> YES	<input checked="" type="radio"/> NO
(6) \$ 6.00	<input type="radio"/> YES	<input checked="" type="radio"/> NO
(7) \$ 7.00	<input type="radio"/> YES	<input checked="" type="radio"/> NO
(8) \$ 8.00	<input type="radio"/> YES	<input checked="" type="radio"/> NO
...		
(n)		

# 2<sup>nd</sup> Price Auction

- (1) Everyone states their maximum Willingness to Pay.
- (2) Person stating the highest bid wins the auction, but pays the amount of the **2<sup>nd</sup> highest bid**.

Adan \$10

Tetsuya \$??

Monica \$3

Masaya \$8

# 2<sup>nd</sup> Price Auction

- (1) Everyone states their maximum Willingness to Pay.
- (2) Person stating the highest bid wins the auction, but pays the amount of the **2<sup>nd</sup> highest bid**.

Ravi \$10

Jin Seong \$??

Srini \$3

George \$8

# Price can dramatically affect profits

Annual demand = 1,000,000 units

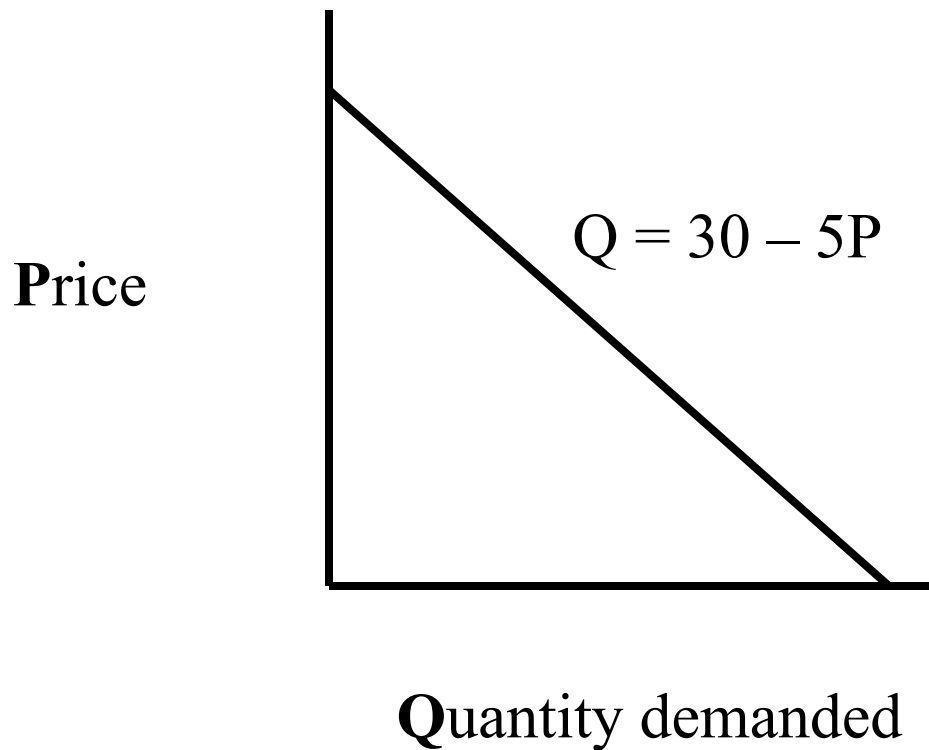
Production costs = \$1.96

Current price = \$2

Suppose you increased price by 1%

By what percentage would profits increase? \_\_\_\_\_%

# The demand curve shows the relation between price and demand



$$\pi = PQ$$

$$\pi = P(30-5P)$$

$$\pi = 30P - 5P^2$$

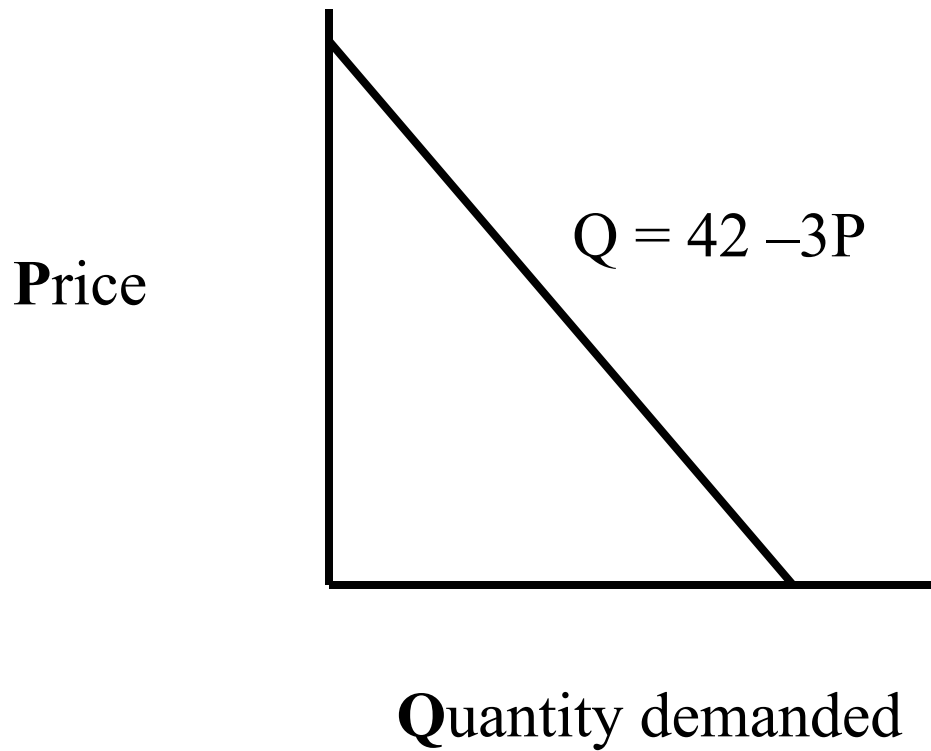
$$\frac{\partial \pi}{\partial P} = 30 - 10P$$

$$0 = 30 - 10P$$

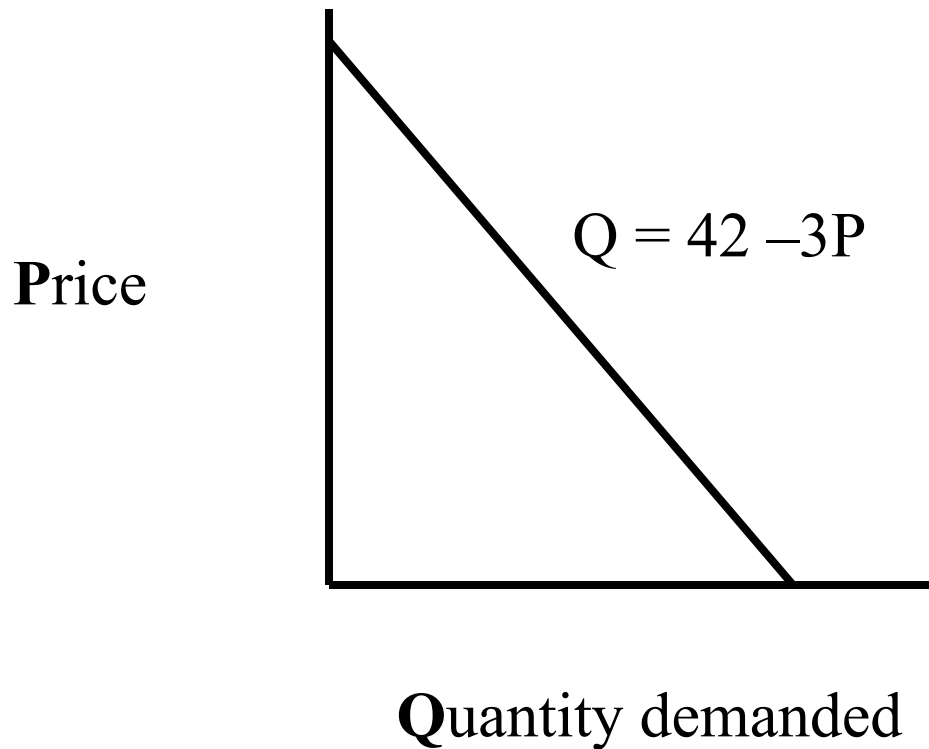
$$-30 = -10P$$

$$P^* = \$3$$

# What are total profits at profit maximizing price?



# What are total profits at profit maximizing price?



$$\pi = PQ$$

$$\pi = P(42 - 3P)$$

$$\pi = 42P - 3P^2$$

$$\frac{\partial \pi}{\partial P} = 42 - 6P$$

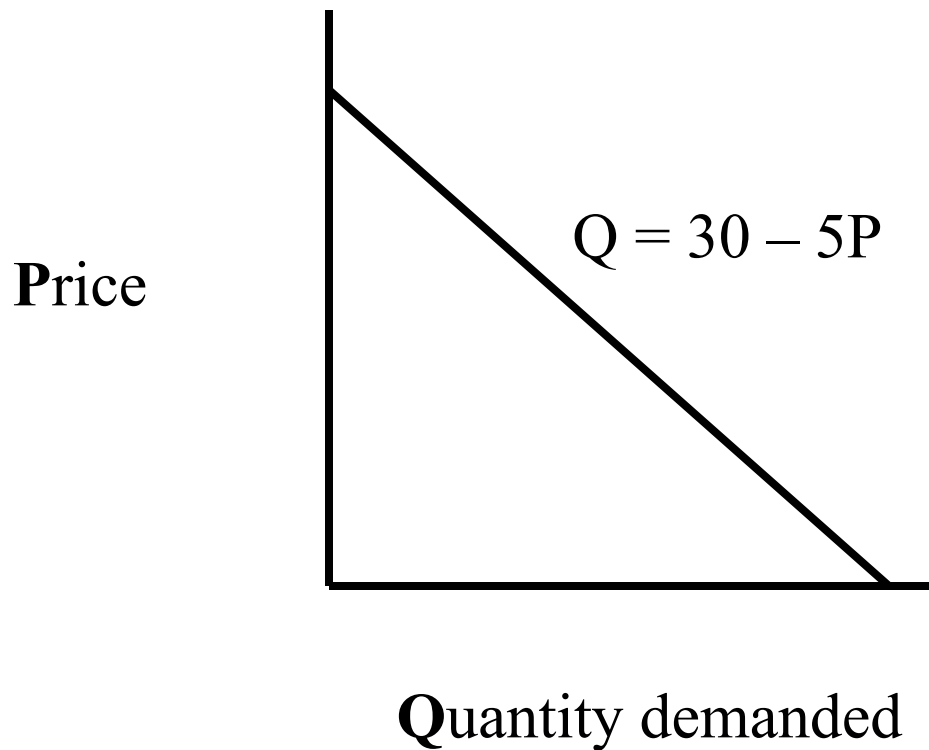
$$0 = 42 - 6P$$

$$-42 = -6P$$

$$P^* = \$7$$

$$21 * \$7 = \$147$$

# The demand curve shows the relation between price and demand



$$\pi = PQ$$

$$\pi = P(30-5P)$$

$$\pi = 30P - 5P^2$$

$$\frac{\partial \pi}{\partial P} = 30 - 10P$$

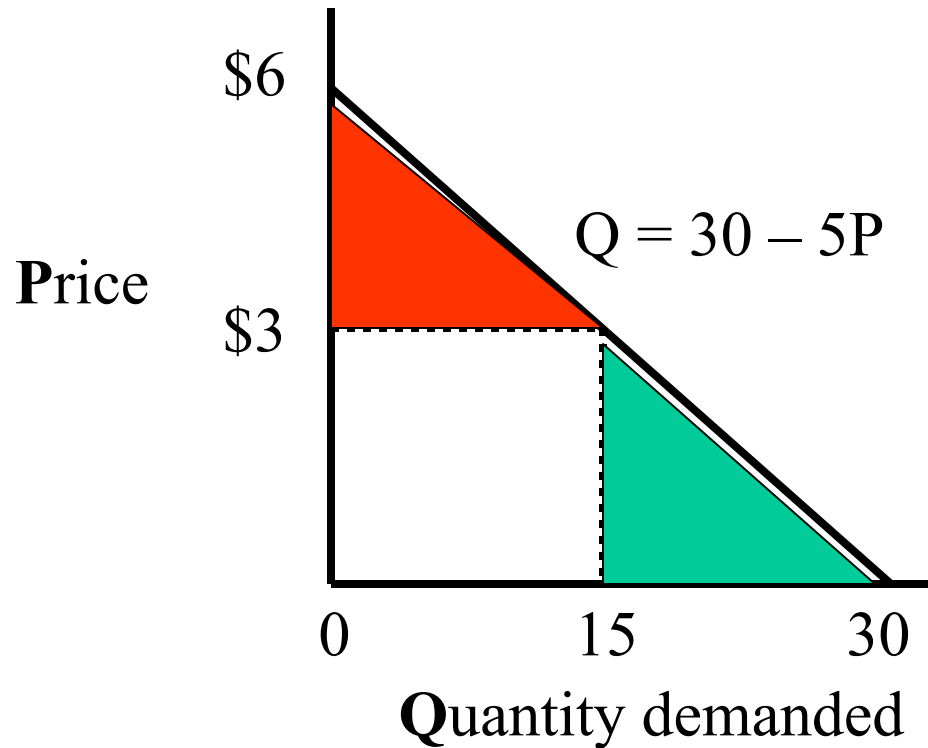
$$0 = 30 - 10P$$

$$-30 = -10P$$

$$P^* = \$3$$

# Price Discrimination:

**gouging the rich** and **discounts for the poor**

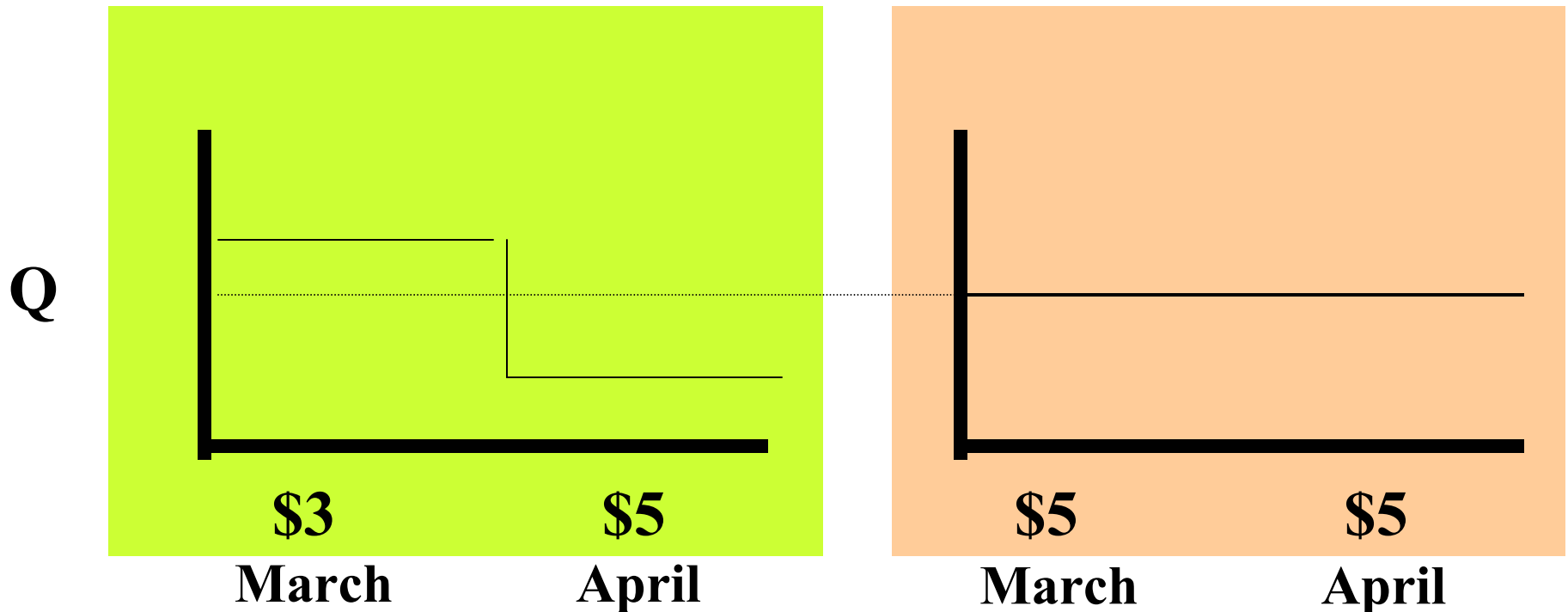


# Examples of price discrimination

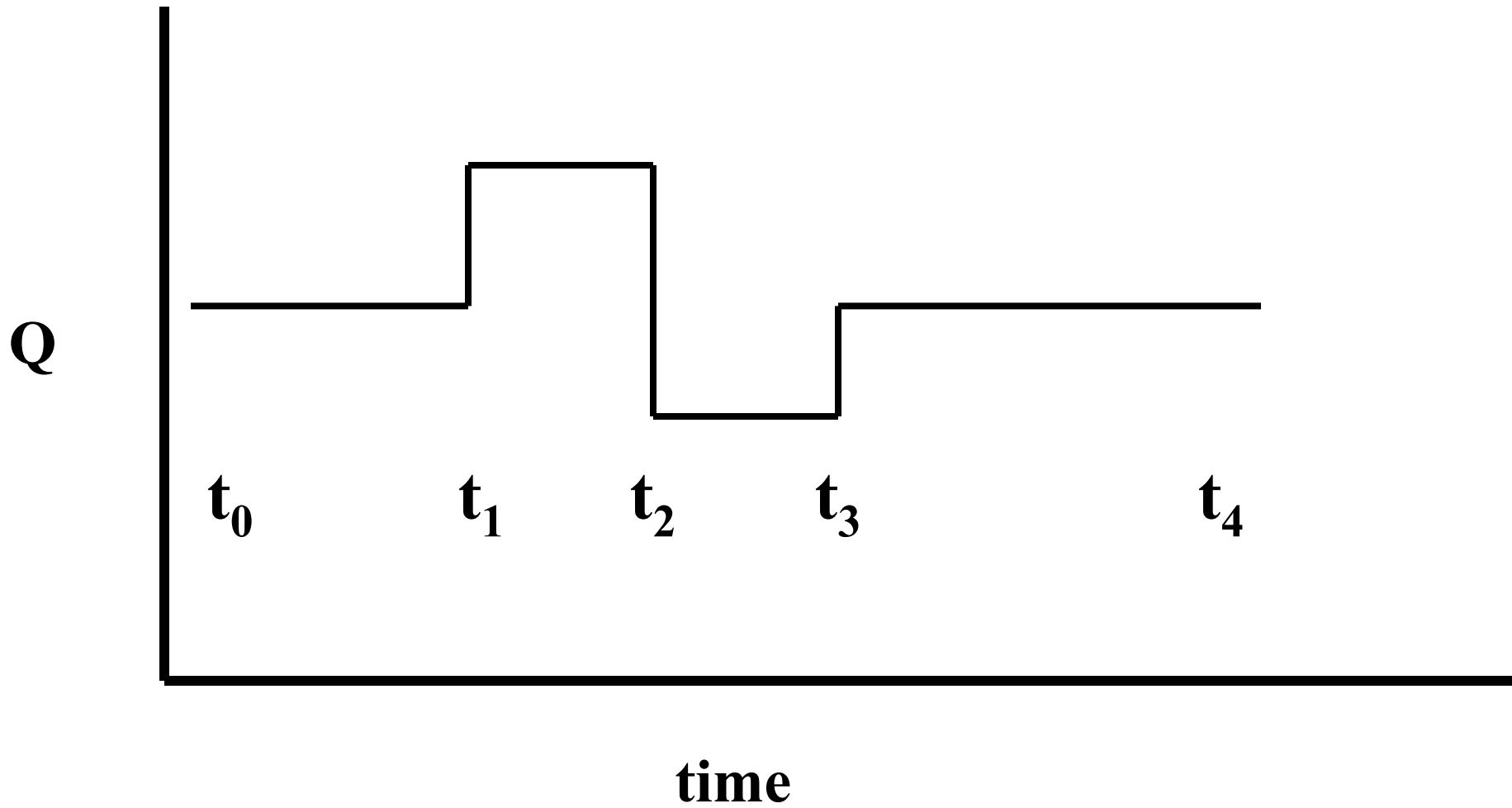
- senior citizen & college student discounts
- matinee prices vs. evening movie prices
- coupons & rebates

# Price promotions (sales)

- What are some **dis**advantages?
  - Negative signaling about quality
  - Consumers delay purchase anticipating future sales
  - Establishes lower reference price



# More problems with price promotions (sales)



# lowering price to steal market share: the effect on profits

Annual demand = 100 units

Market Share = 50%

Production costs = \$1.60

Current price = \$2

Suppose you decreased price by 10%

This caused Market share to increase by 20%

By what % would profits increase or decrease?

50 units at 40 cents profit per unit = \$20

70 units at 20 cents profit per unit = \$14

# More examples of price discrimination

- “peak load pricing”
- scholarships
- A 60 milligram capsule of Prilosec costs more than twice what a 30 milligram capsule costs
- Quote regular rate, followed by “special” rates
- Quantity discounts
- “Step” discounts
- Manipulating product design

# Product Line Pricing

- Crest & Gleem
- Fresh & Day Old Croissants
- Pentium III and Pentium IV computers
- "*Bracketing the Competition*": Price one product line just above the competition and one just below it. This gives the consumer little reason to buy the competitor.

		<b>Smirnoff (\$16)</b>
<b>Smirnoff (\$15)</b>	<b>Smirnoff (\$15)</b>	
	Wolfschmidt (\$14)	Wolfschmidt (\$14)
		<b>Popov (\$13)</b>

# Product Bundling

- **“Selling two or more products or services at a price that is equal to or lower than the combined prices of the individual products”**
- Prix fixe dinners
- Season tickets
- Microsoft Office
- DirecTV’s “platinum package”

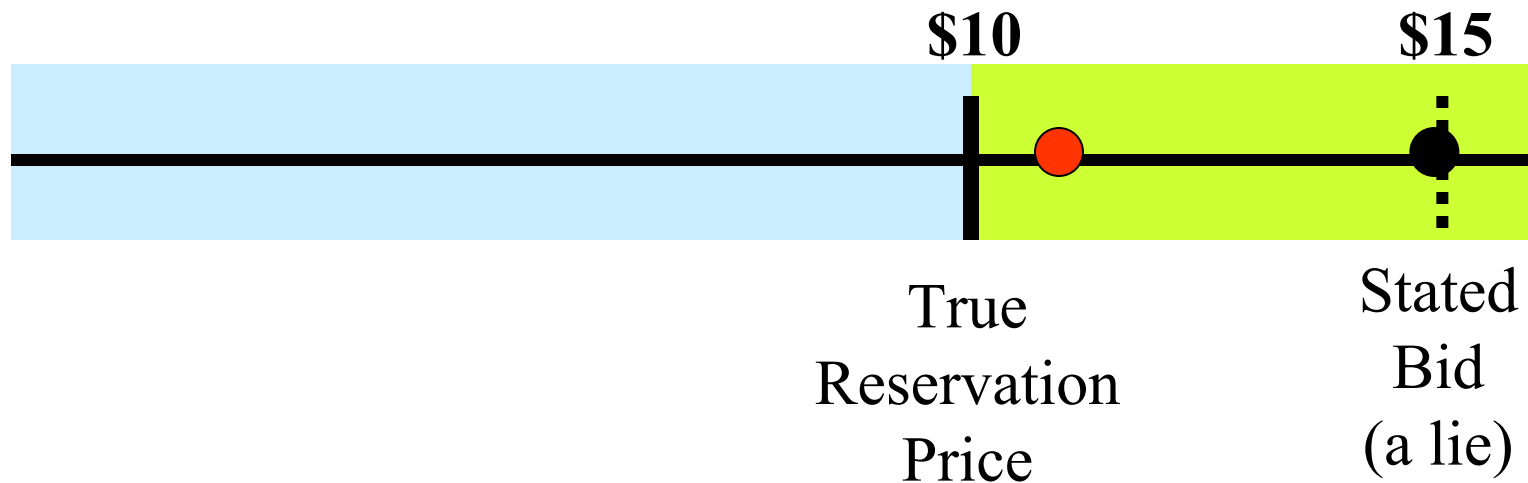
# Heterogenous consumers with different reservation prices

	<b>Disney Channel</b>	<b>Cinemax</b>
<b>Person A</b>	<b>\$12</b>	<b>\$4</b>
<b>Person B</b>	<b>\$4</b>	<b>\$12</b>

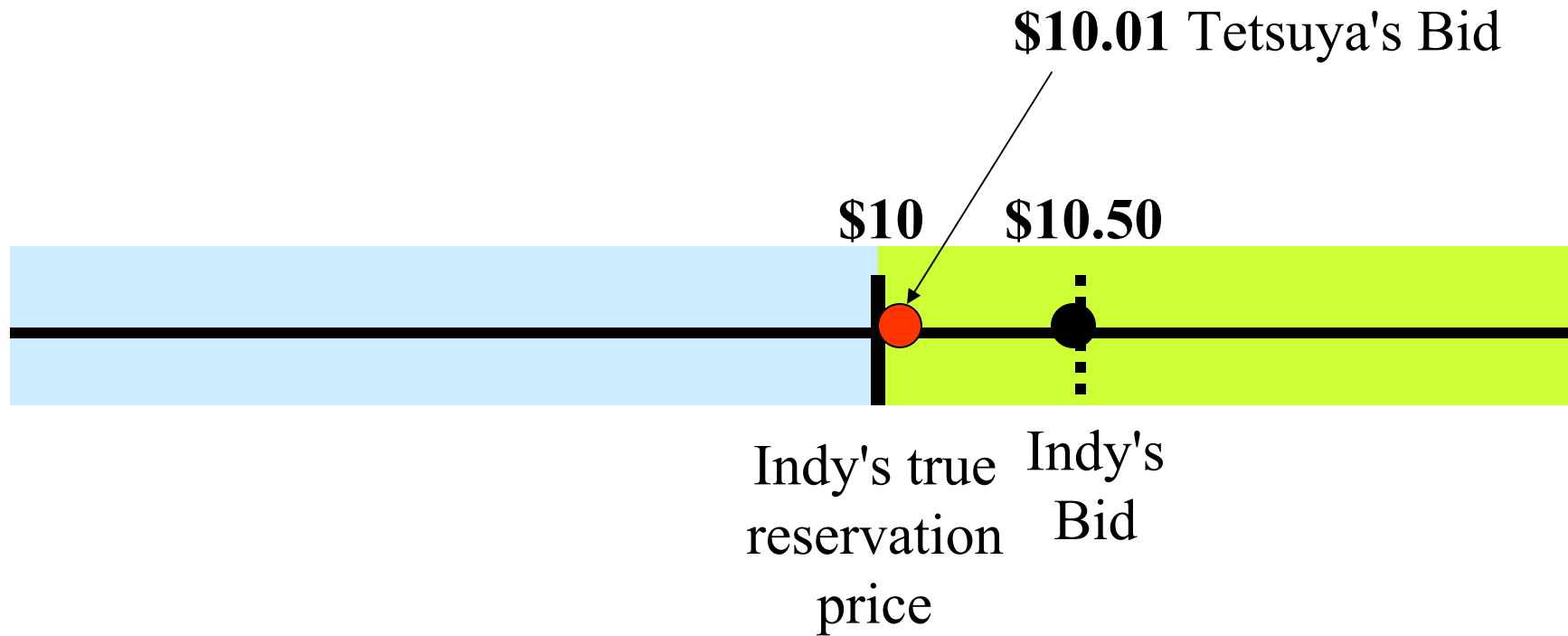
# Why underbidding & overbidding are suboptimal



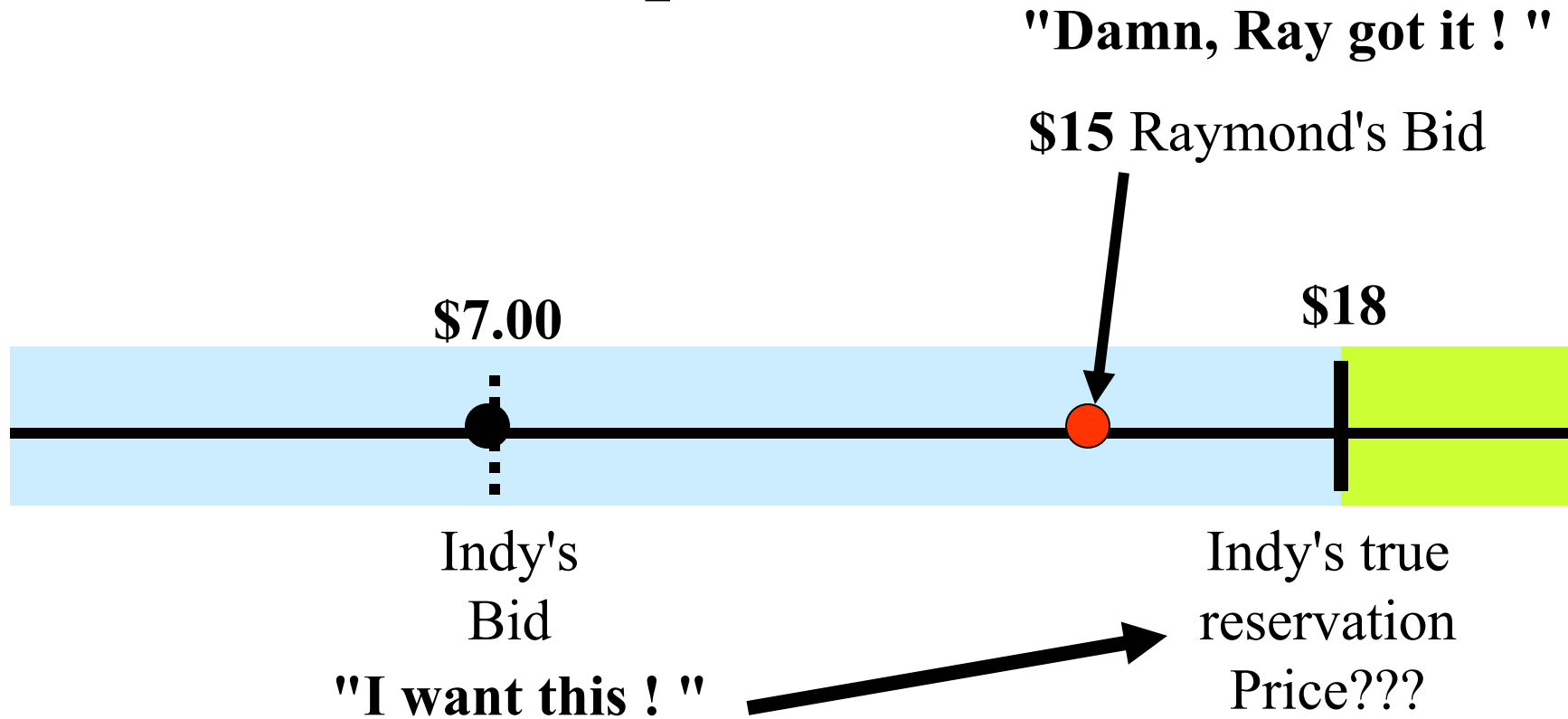
# Why underbidding & overbidding are suboptimal



# Indy, why is overbidding suboptimal?

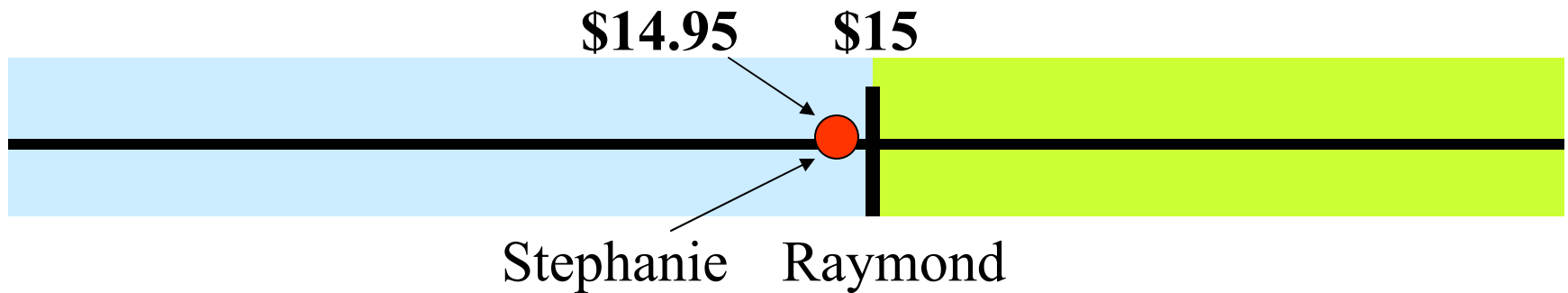


# Indy, why is underbidding suboptimal?

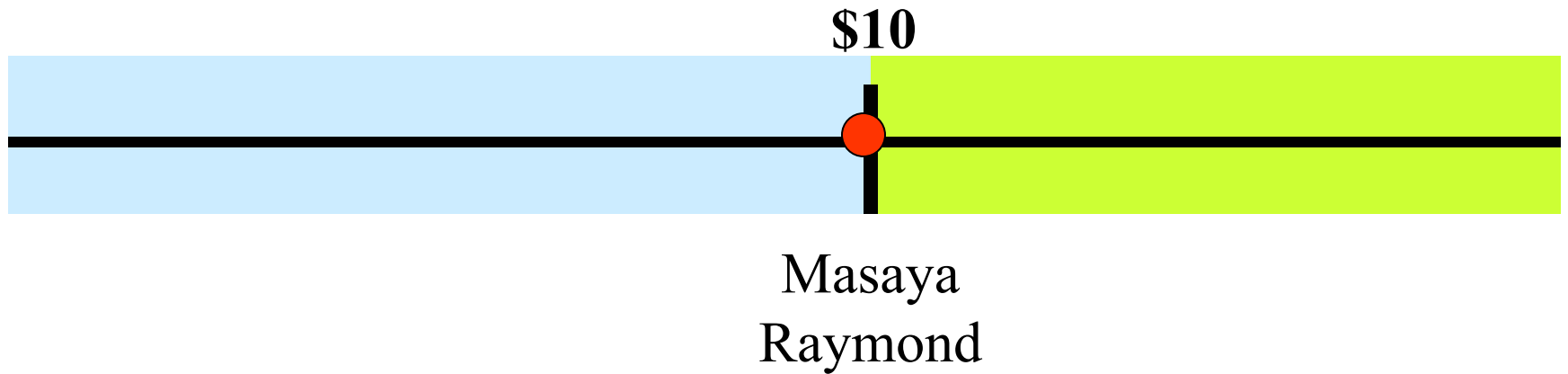


What were the winning bids?  
(and what were the 2nd bids?)

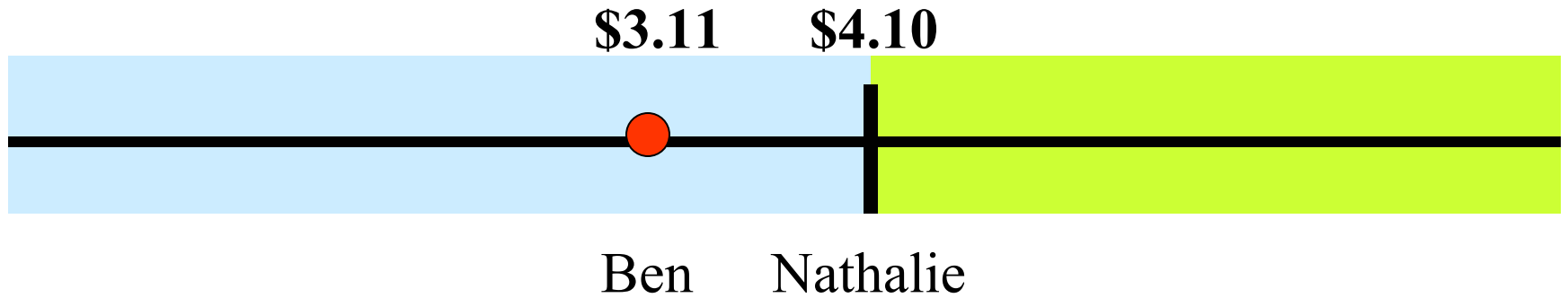
Positioning: The battle for your mind



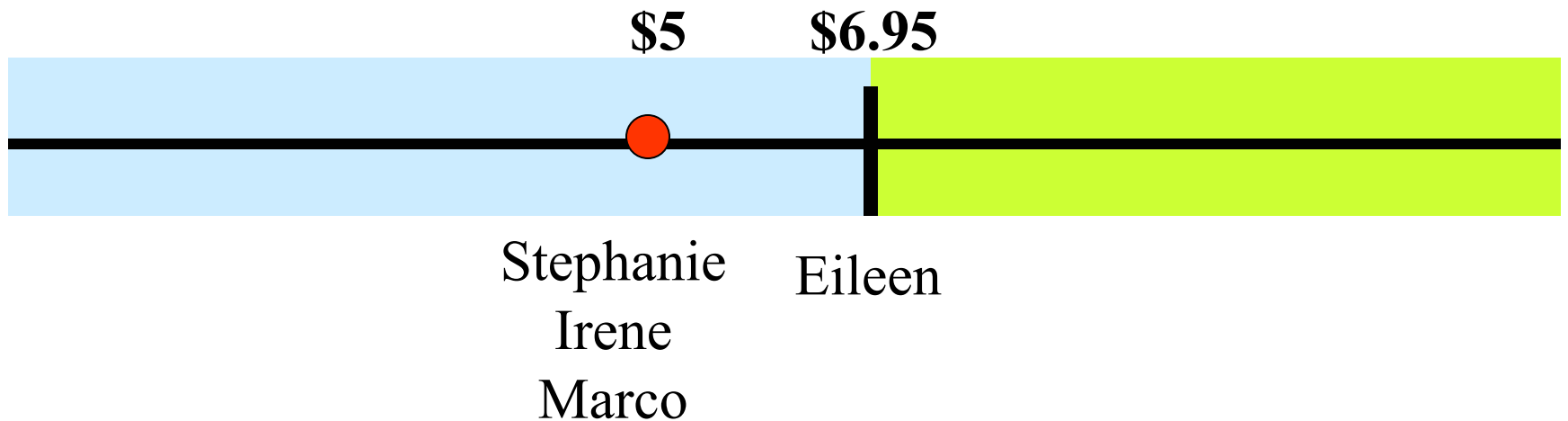
# Red Velvet Sachet



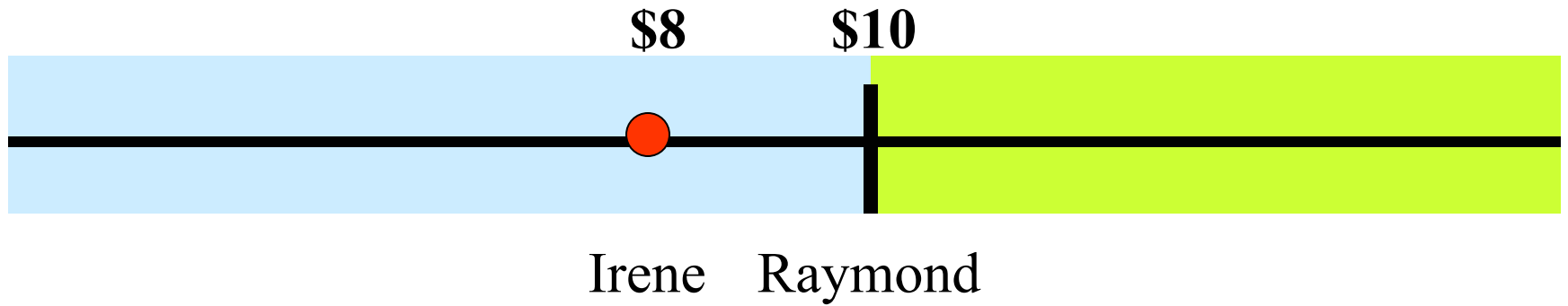
# Isoflex Squeezeball



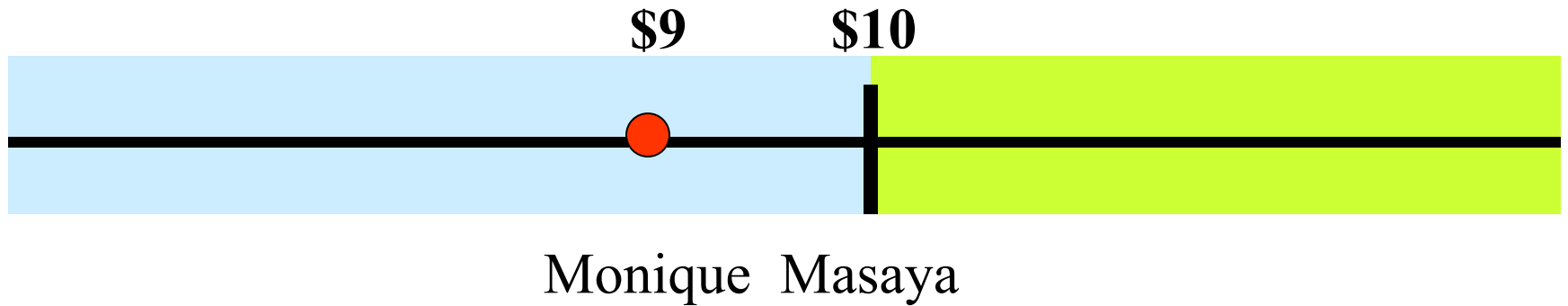
# Magnetic Sculpture



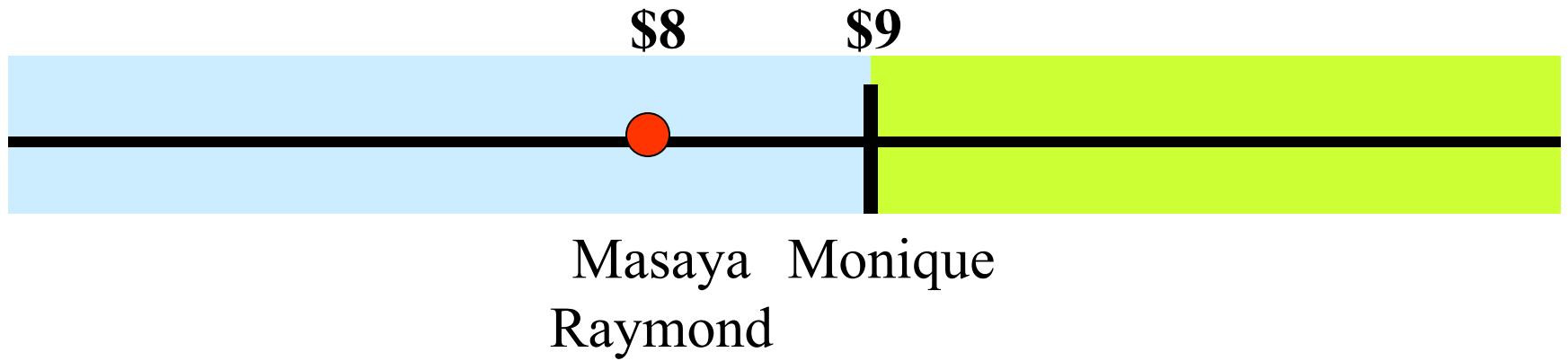
# Wooden Puzzle



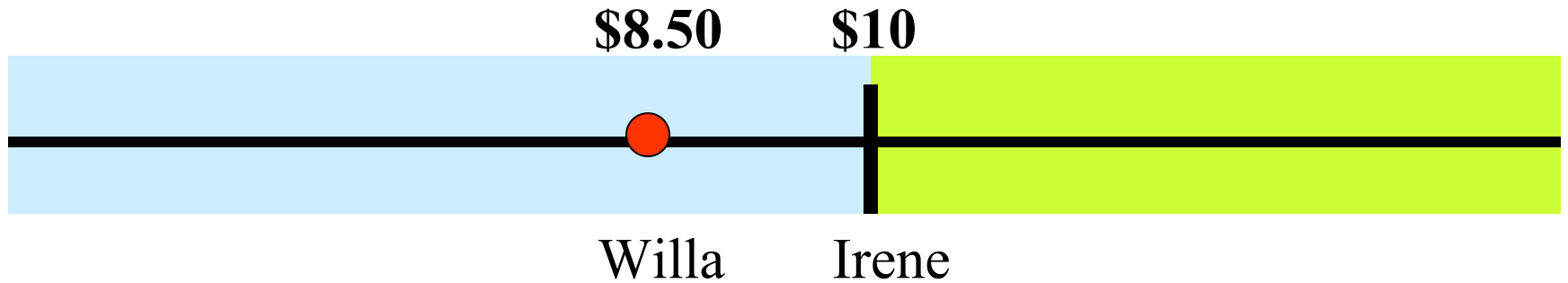
# Purple Plaid Sachet



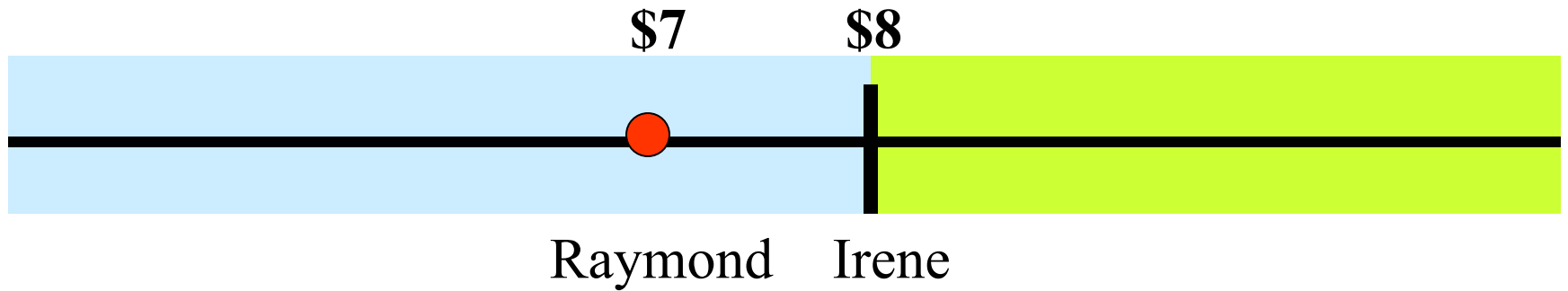
# Red Hunt Sachet



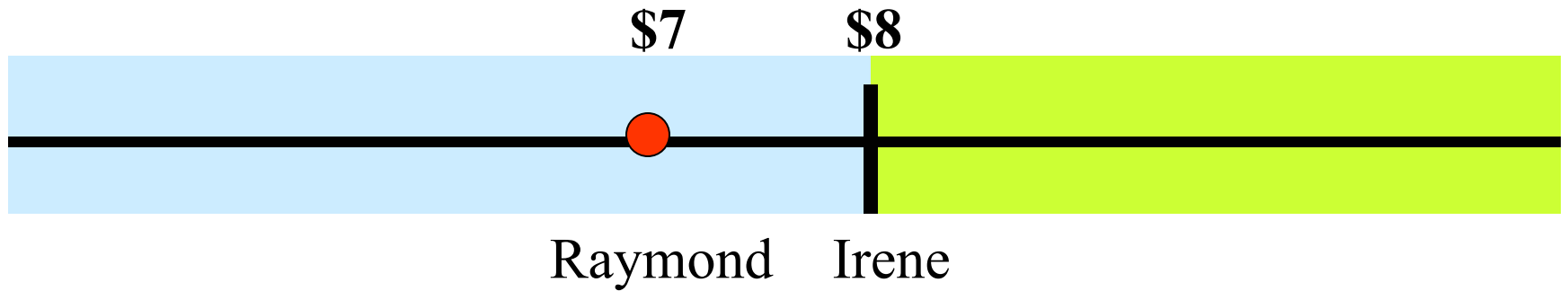
# Mini Bonsai Tree Kit



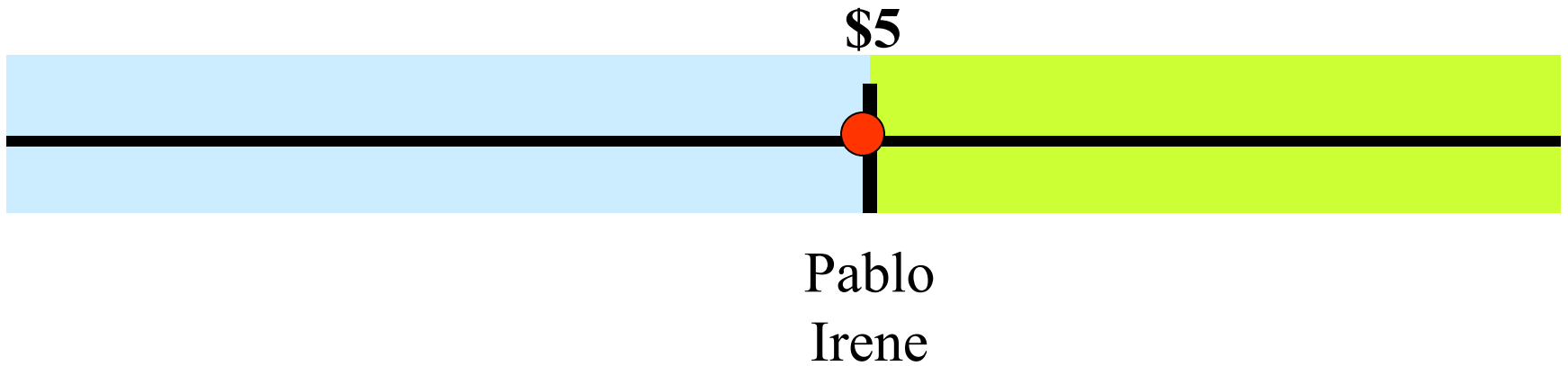
dark blue MIT coffee mug



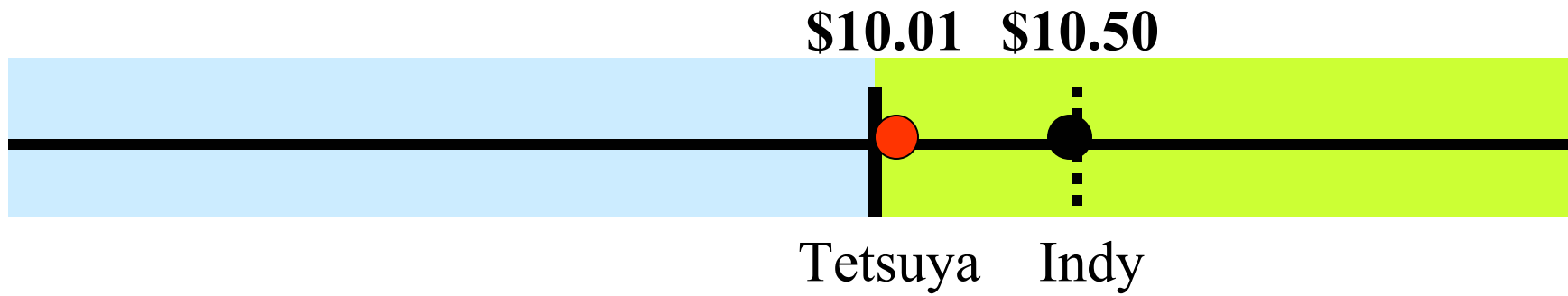
# beige MIT coffee mug



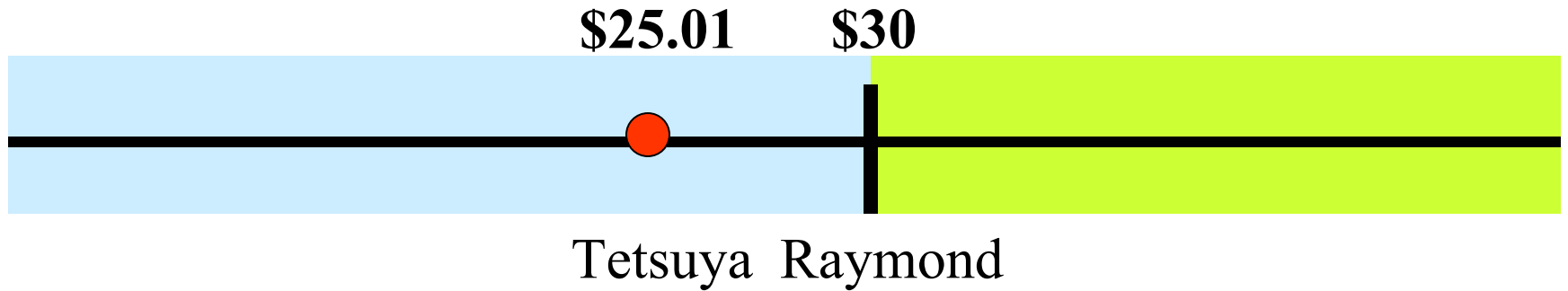
8 oz of chocolate covered blueberries



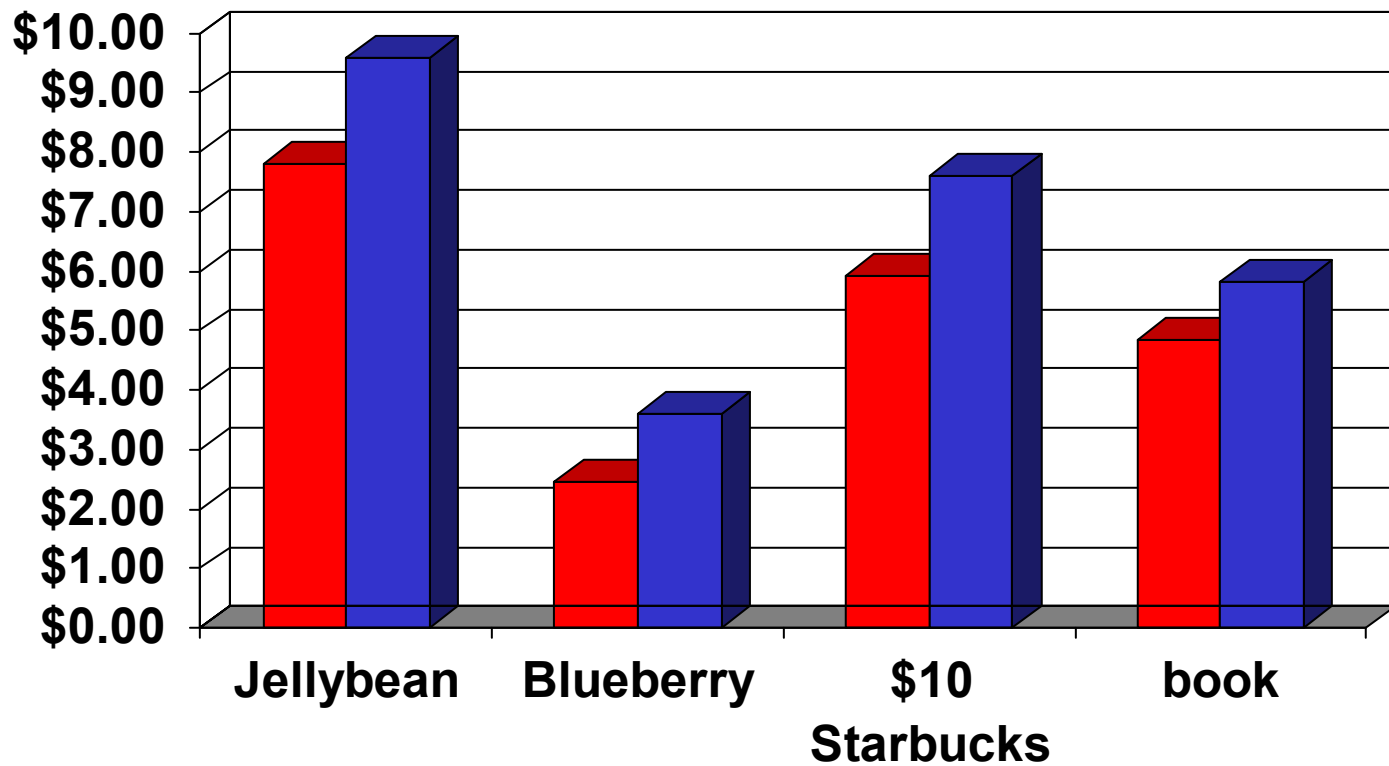
# The \$10 Starbucks card



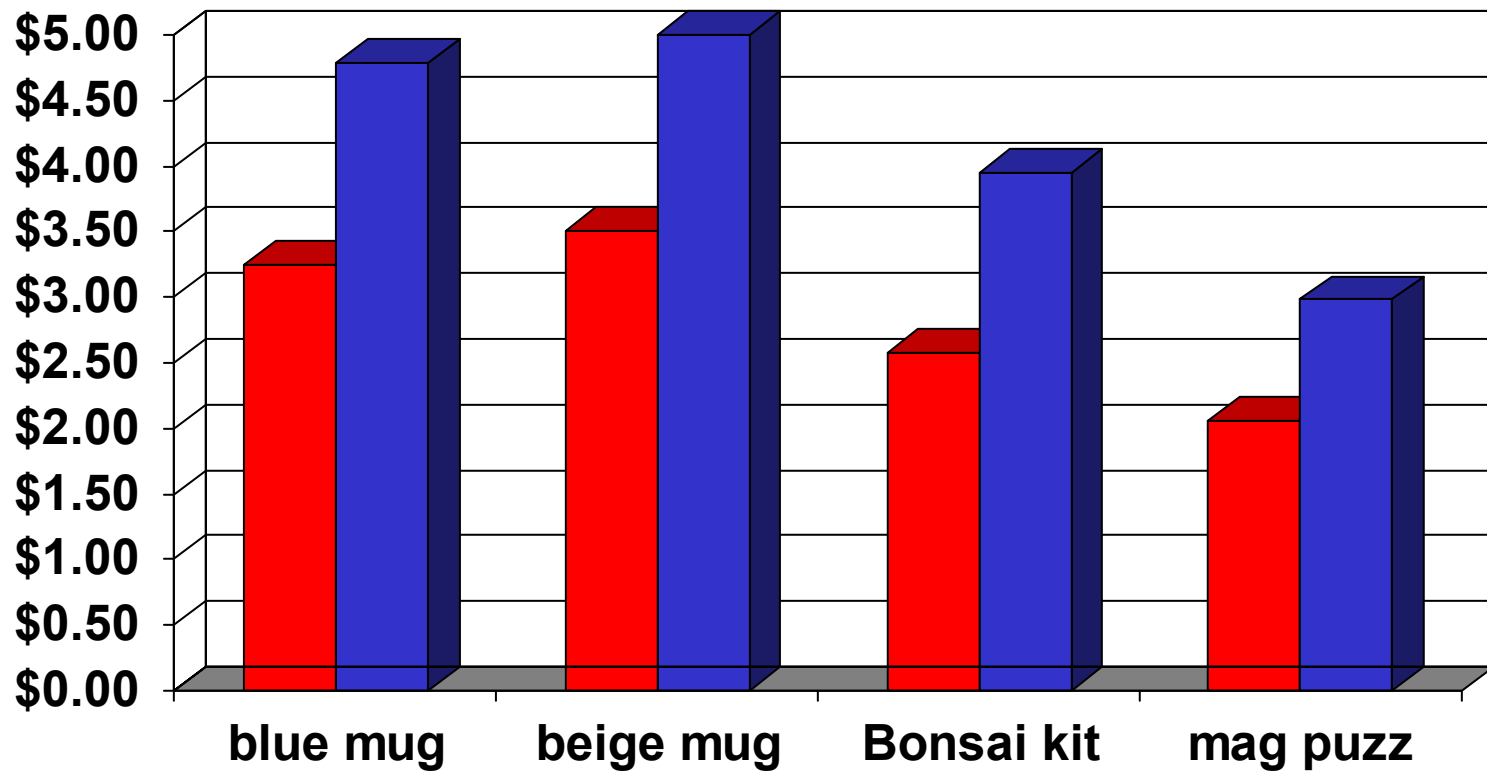
# fully stocked Jelly Belly machine



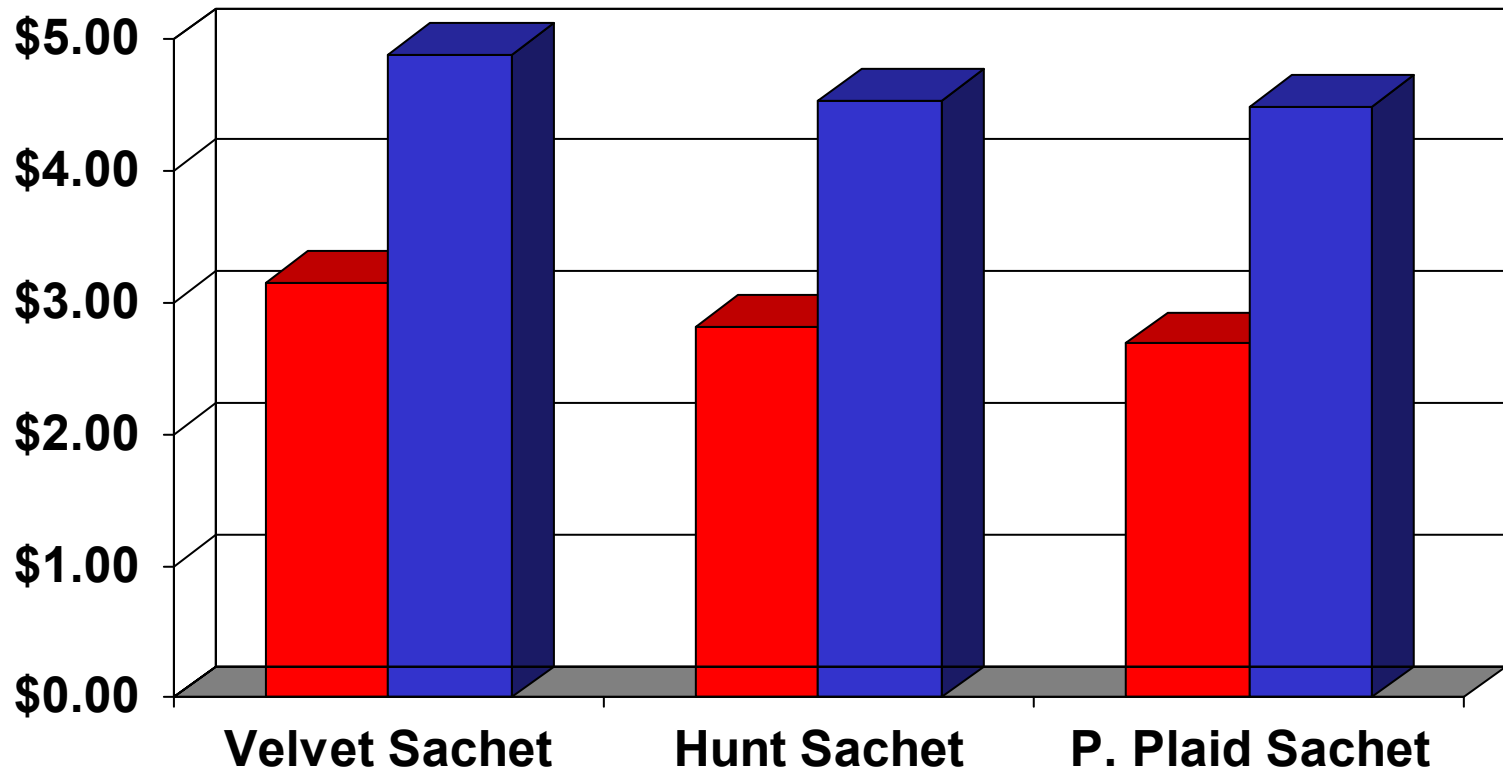
# Average bid & predicted average bid



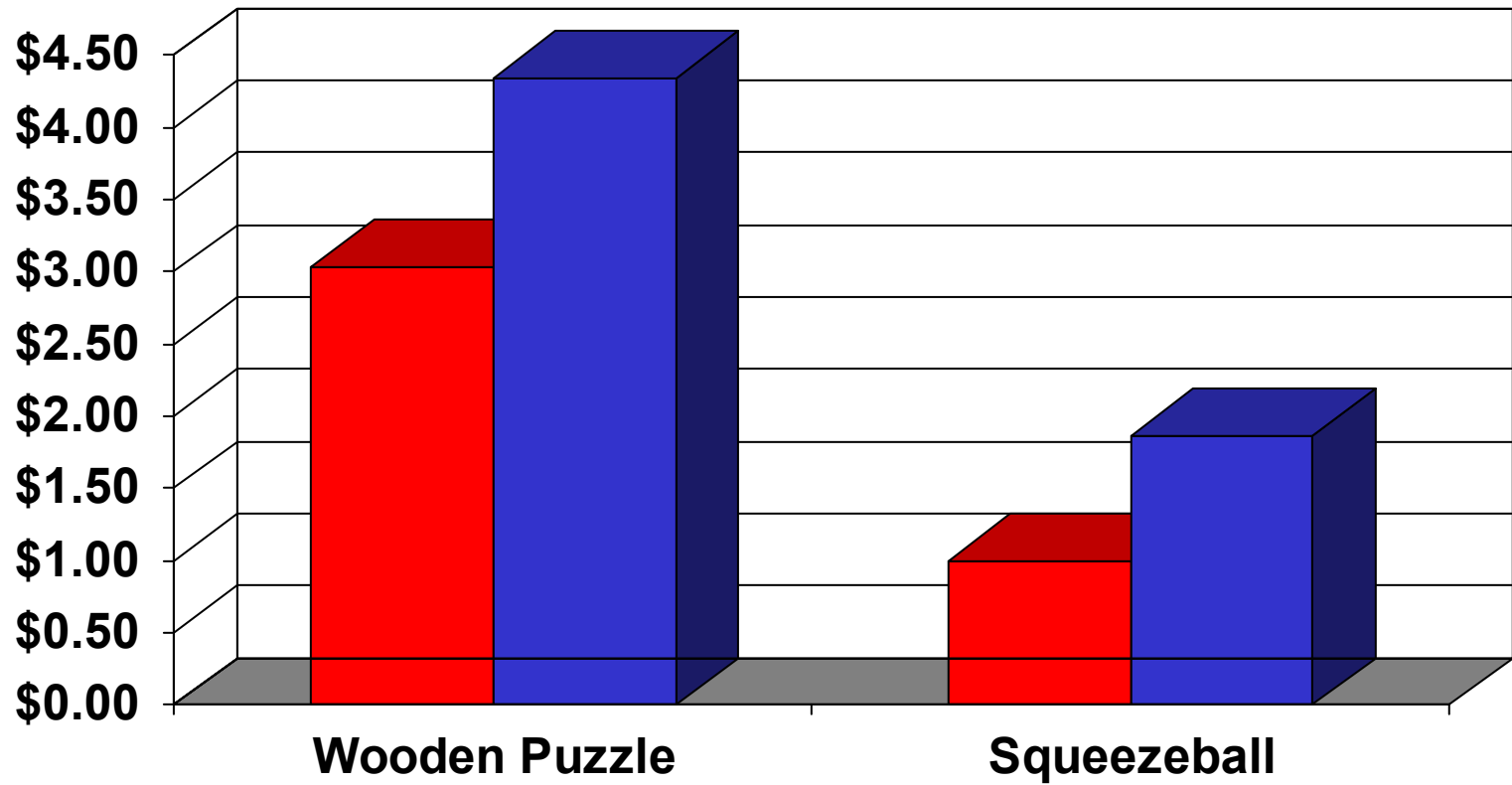
# Average bid & predicted average bid



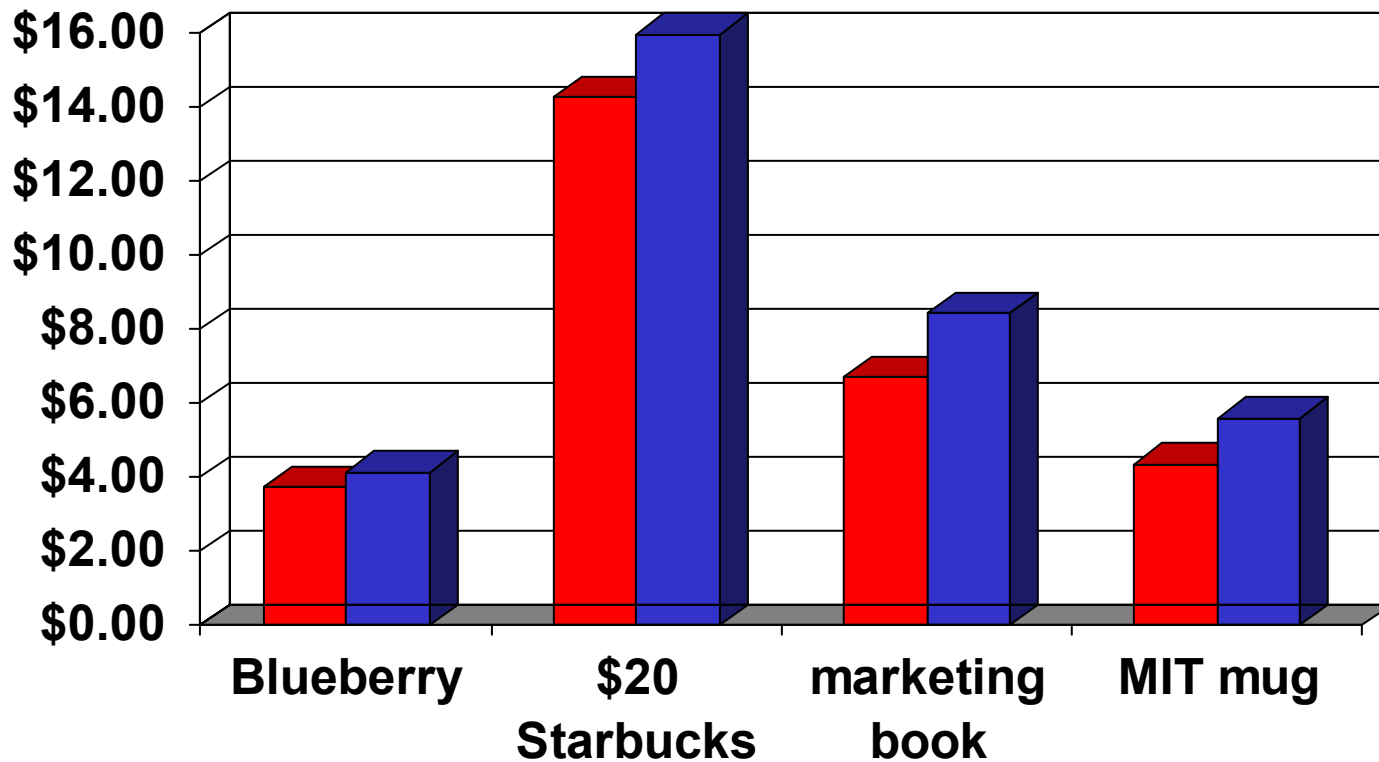
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# Average bid & predicted average bid



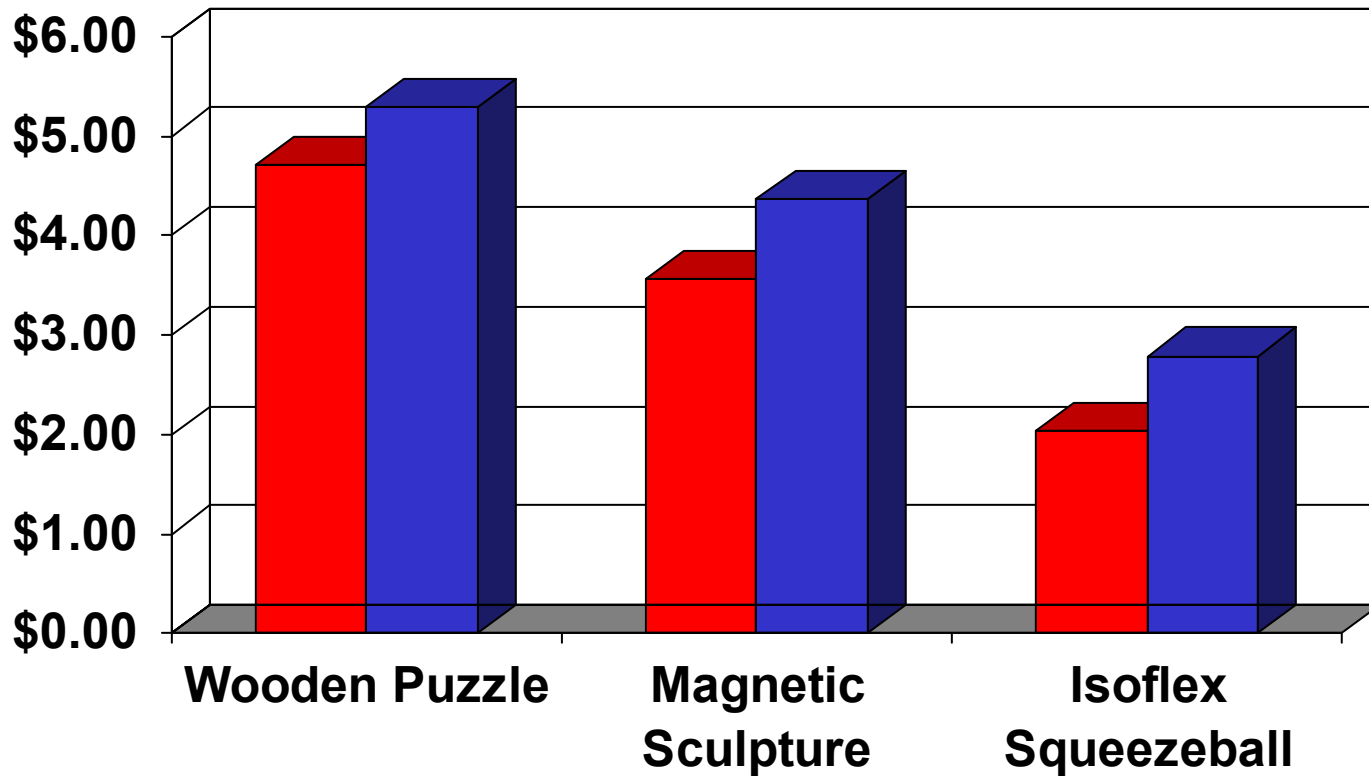
# Average bid & predicted average bid

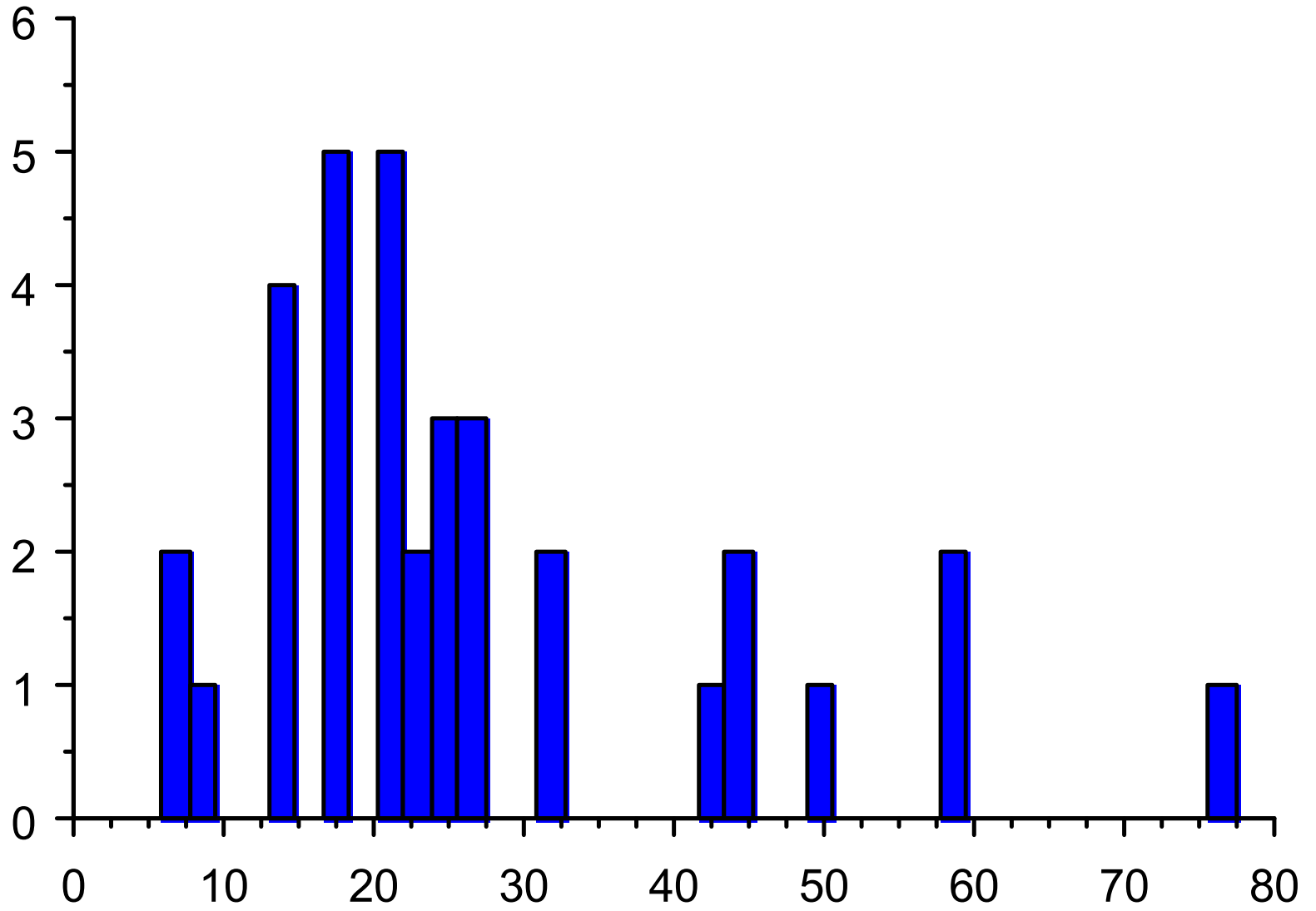


# Average bid & predicted average bid



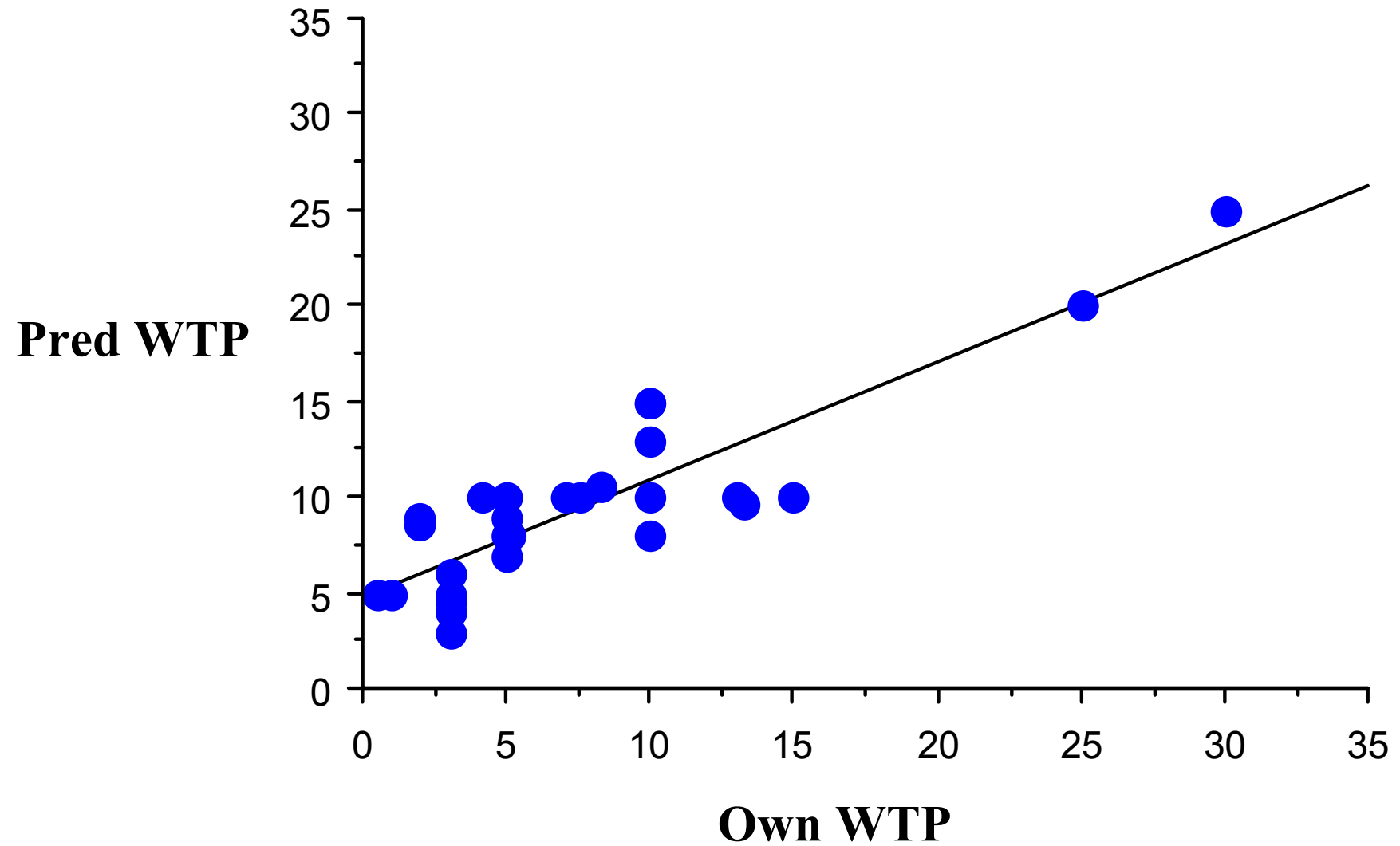
# Average bid & predicted average bid



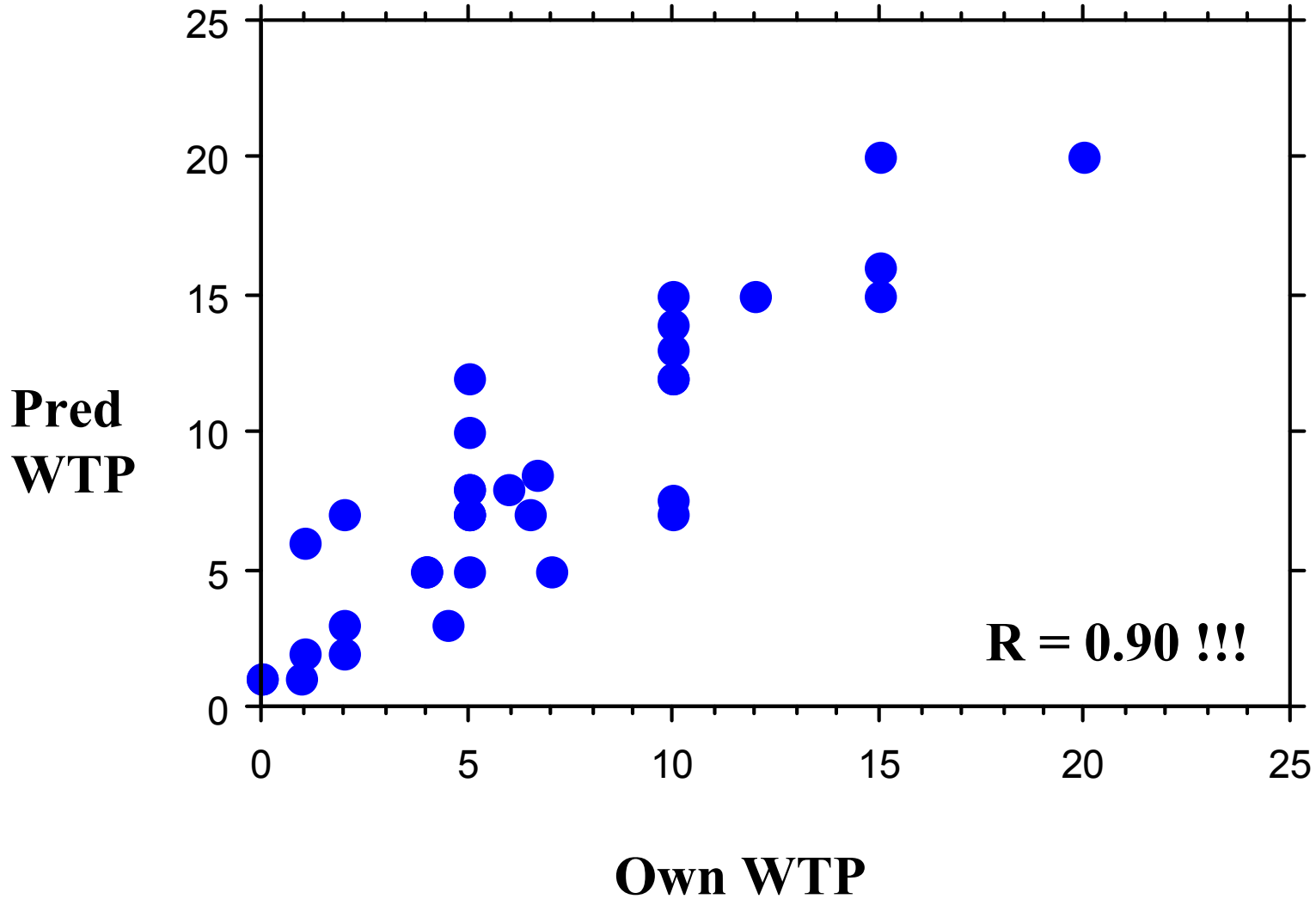


**Total Error in \$ for all 10 estimates**

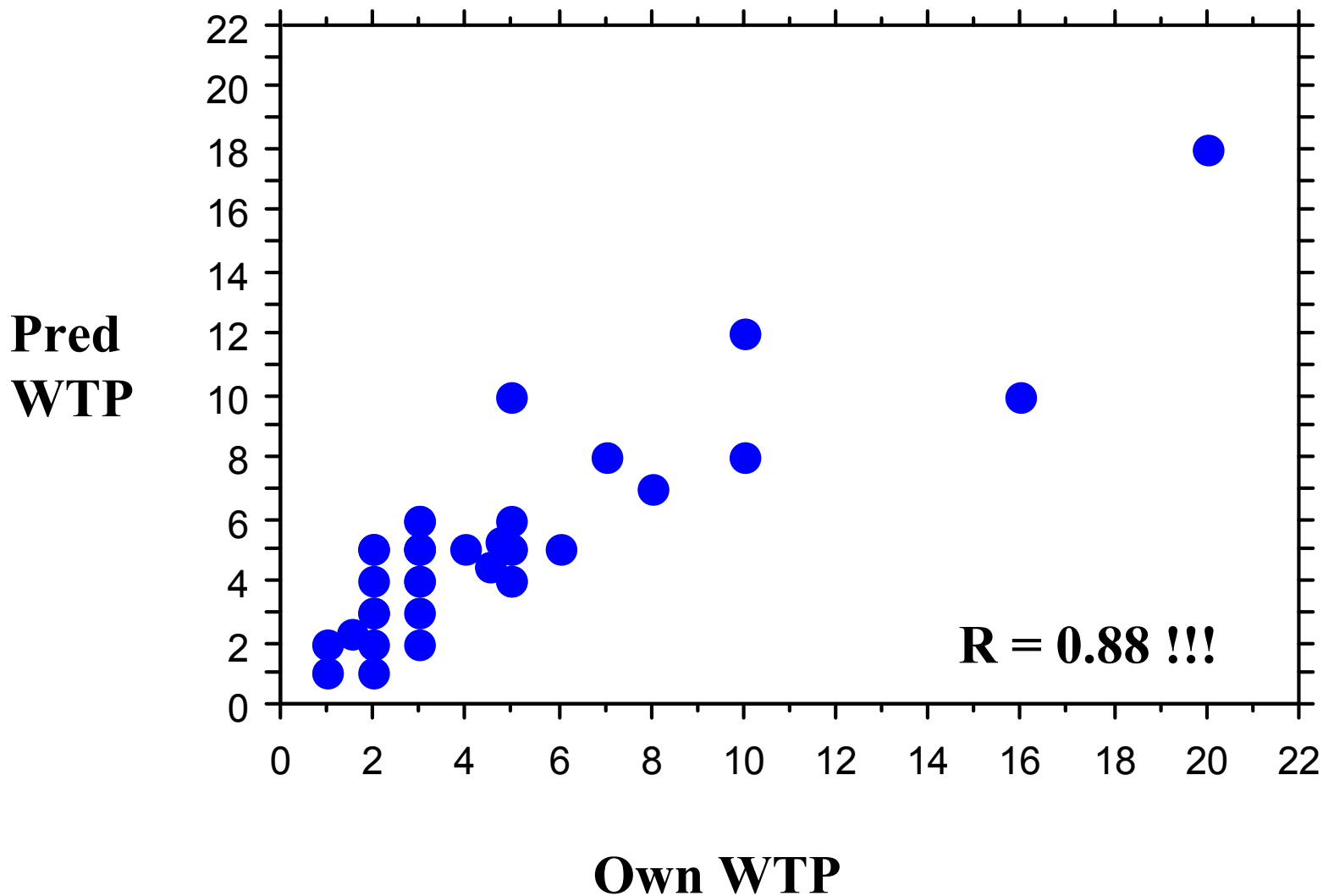
# jellybean machine



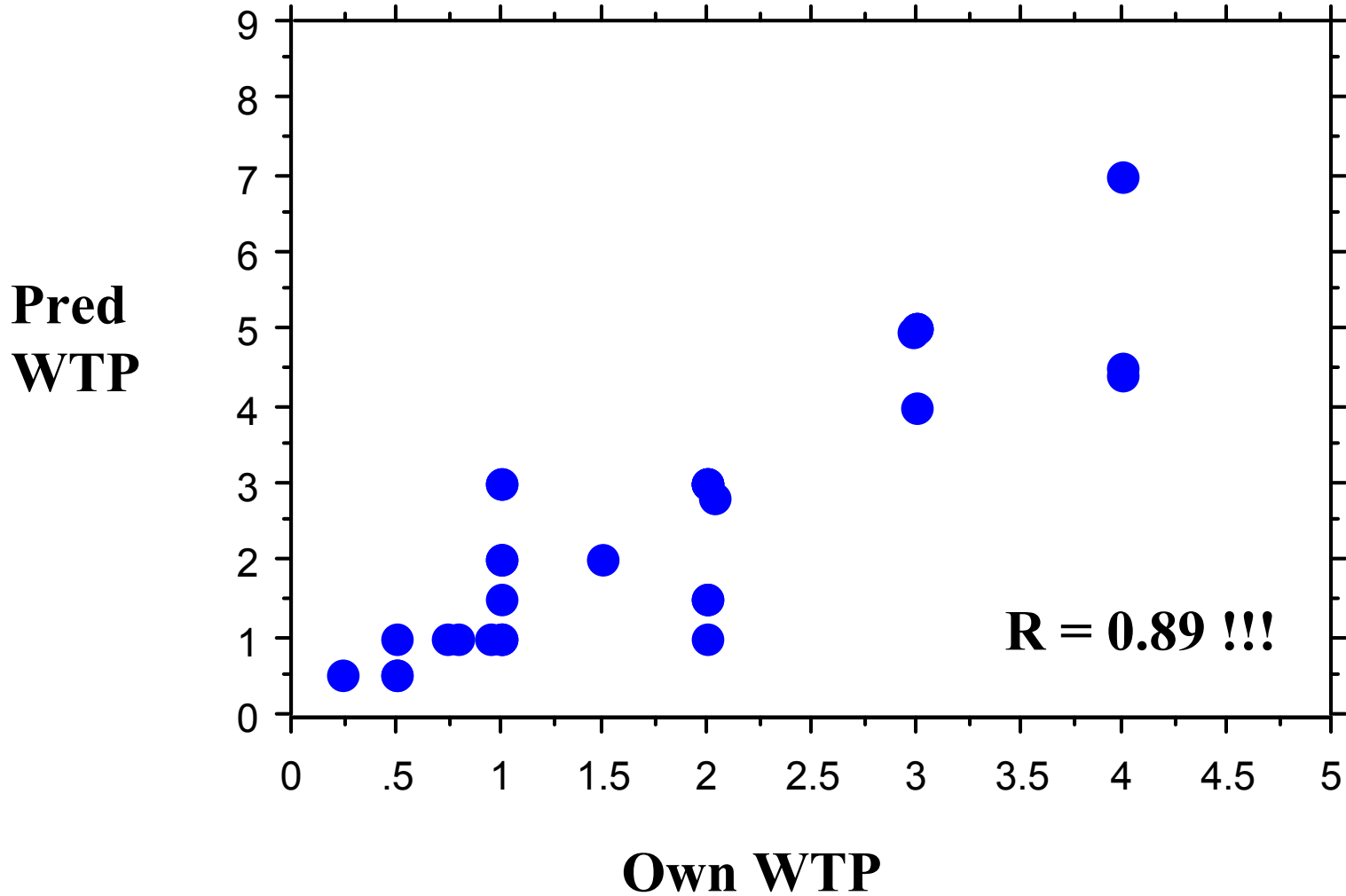
# Direct Marketing Book



# Wooden Puzzle



# Isoflex Squeezeball



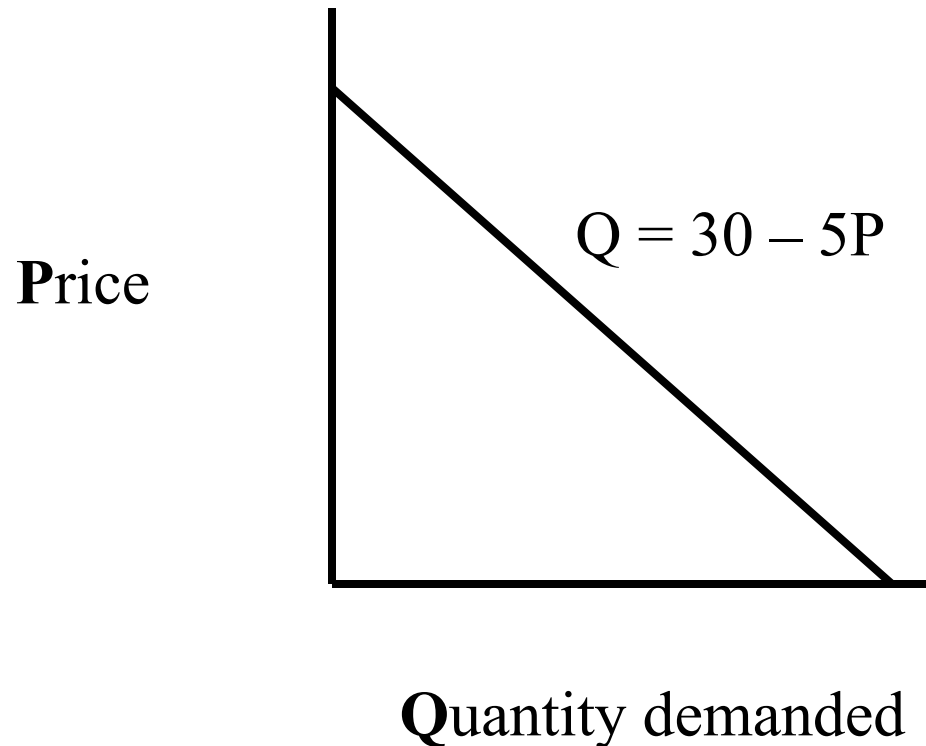
Repeat after me...

- **Everybody is not like me.**
- **Everybody is not like me.**
- **Everybody is not like me.**

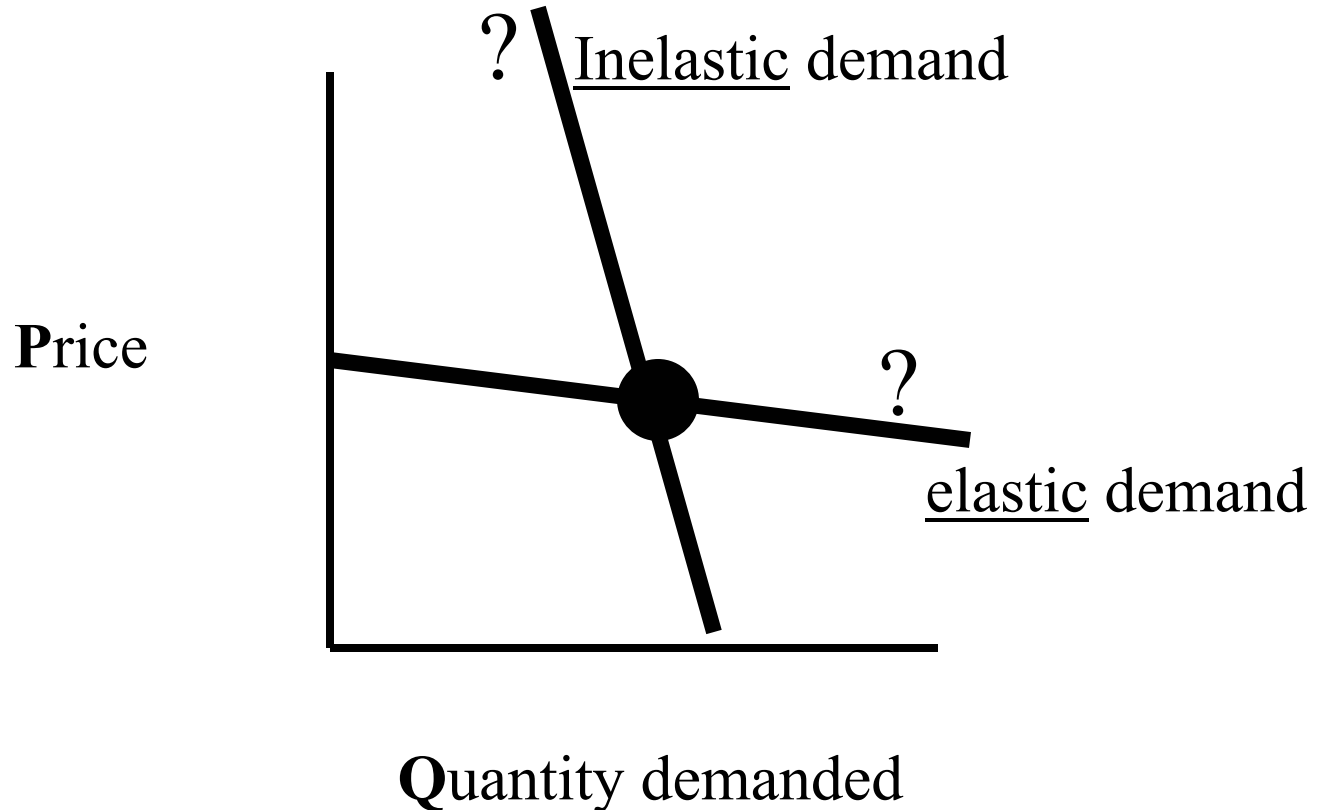
In case you forgot...

- **NASCAR is the #1 sport in the U.S.**
- **NASCAR is the #1 sport in the U.S.**
- **NASCAR is the #1 sport in the U.S.**

# The demand curve from economics textbooks is a theoretical construct



**Often, we observe one point of demand at one given price**



# Bundling

**Soup**

**Salad**

**Soup & Salad**

**Prices**

**\$4**

**\$4**

**\$6**

**Harry's values**

**\$5**

**\$2**

**Sally's values**

**\$2**

**\$5**

# Bundling

**Soup**

**Salad**

**Soup & Salad**

**Prices**

**\$4**

**\$4**

**\$X**

**Harry's values**

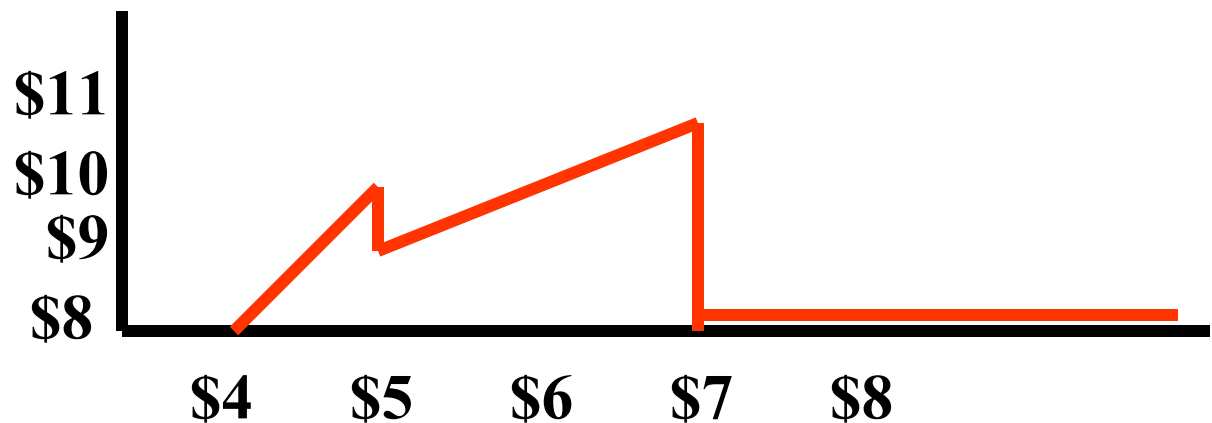
**\$5**

**\$3**

**Sally's values**

**\$1**

**\$5**



# Penetrating vs. Skimming a market

- **Penetration Pricing:** low margin but high volume
  - good if "economies of scale" in production costs
  - capture a large share of the market (first mover advantage)
  - dissuades entry (but easily copied unless you have prod. adv.)
  - dangerous if there is a strong price-quality association
  - limits flexibility because consumers react more strongly to price increases than price decreases
- **Skimming (Prestige Pricing):** high margins at expense of volume
  - good early in product life cycle, because "early adopters" are less price sensitive
  - good if there is little risk of competition
  - good if there is a strong price-quality association
  - more flexibility because price can be reduced

# Some psychological pricing issues

1. Remember Prospect Theory
2. Signaling value of sale signs
3. *Hedonic* efficiency vs. *Financial* efficiency
4. Worry about fairness
5. Manage price expectations
6. Encourage favorable comparisons
7. Discourage unfavorable comparisons
8. Pennies a day

**Prospect Theory applied:  
“cash discount” or “credit card surcharge”?**

**Gas Station A: Sells gasoline for \$1.60 per gallon and gives a \$0.10 per gallon discount if buyer pays with cash**

**Gas Station B: Sells gasoline for \$1.50 per gallon and charges a \$0.10 per gallon surcharge if buyer pays with a credit card**

# Prospect Theory applied: “regular tuition” or “scholarship”?

**College A: Charges \$10,000 a semester with a \$5000 “scholarship” if you are in a price sensitive category**

**College B: Charges \$5,000 a semester, with a \$5000 surcharge if you are in a price insensitive category**

# \$9 Endings imply SALE???



# **Payment timing:** *financial efficiency vs. hedonic efficiency*

- Suppose you were going on a vacation in the Bahamas in 5 months. The vacation package costs \$1200. Which would you prefer?

**4 monthly payments of \$300, beginning today**

**4 monthly payments of \$300, beginning the day you return**

# Fairness

"Your favorite sports team has made the playoffs. Its first-round playoff series is a best of seven series with Games 1&2, and games 6&7 played at home. General admission tickets had been priced at \$20 during the regular season." However, for these four playoff games, the team raises ticket prices to \$40.

Is this price increase fair?      YES      NO

"Your favorite sports team has made the playoffs. Its first-round playoff series is a best of seven series with Games 1&2, and games 6&7 played at home. General admission tickets had been priced at \$20 during the regular season." After game 2, the team decides to raise ticket prices to \$40 for games 6&7.

Is this price increase fair?      YES      NO

# Fairness

"A grocery store is out of peanut butter, but is about to receive a new shipment. The owner finds out that the wholesale price of peanut butter has increased 20%. Thus, the owner decides to increase the price of the new peanut butter by 20%."

Is this price increase fair?      YES    NO

"A grocery store has a full stock of peanut butter and is due to receive a new shipment in the near future. The owner finds out that the wholesale price of peanut butter has increased 20%. Thus, the owner decides to immediately increase the price of peanut butter on his shelves by 20%."

Is this price increase fair?      YES    NO

# Fairness

"In 1996, the Seattle Mariners made it to the American League playoffs. During the season, general admission tickets cost \$15.

For the playoffs, the Mariners raised the price to \$20.

Is this price increase fair?      YES    NO

" A hardware store had been selling snow shovels for \$15.

The morning after a large snowstorm, the store raises the price of its snow shovels to \$20.

Is this price increase fair?      YES    NO

# Encourage favorable comparisons & discourage unfavorable ones

- "You pay \$1000 for a suit and you only wear that once in a while" (Ad at \$80 haircut place)
- Petroleum Jelly sold as *Vaseline Lip therapy* (at 1400% markup!)
- Mobil 1 justifies the cost by reminding people of the price of the car that the oil is intended to protect.
- Michelin, because "so much is riding on your tires" (i.e., Don't even consider endangering your family to save a few bucks, you ###@ing cheapskate, so buy Michelin & overlook our high prices.)

# Encourage favorable comparisons & discourage unfavorable ones

Professor offers a 1 day seminar on pricing to 20 executives

a 1 Day University course is \$600 per participant

Company pays consultants \$3000 a day

Professor asks for \$9000 a day

**NO WAY!**

Professor asks for \$500 per participant

**Sure!!**

# The "pennies a day" strategy

- For only 27 cents a day you can support .....
- For \$100 per year you can help support.....

- 97 cents per day for cellular telephone service
- \$350 per year for cellular telephone service

- Average American eats 1.9 hot dogs per week
- Average American eats 95 hot dogs a year

# Illegal Pricing activities

**Price Fixing** ("collusion")

**Predatory pricing**

**Bait and Switch**

**Deceptive pricing**

- 8:00 am  8:01 am  8:02 am  SALE! \$100  
50% off!

- tinted windows = \$130
- rack & pinion steering = \$380
- **ADM = \$330**

- **Crandall:** "I think it is dumb as hell for Christ's sake, all right, to sit here and pound the #\$\$&\* out of each other and neither one of us making a #@!%ingdime."
- **Putnam:** "Well..."
- **Crandall:** "I mean, you know, goddamn, what is the %&\*#ing point of it
- **Putnam:** "Do you have a suggestion for me?"
- **Crandall:** "Yes, I have a suggestion for you. Raise your goddamn fares 20 percent. I'll raise mine the next morning."
- **Putnam:** "Robert, we..."
- **Crandall:** "You'll make more money, and I will too."
- **Putnam:** "We can't talk about pricing."
- **Crandall:** "Oh, \$#%& Howard, We can talk about any goddamn thing we want to talk about."

# Illegal Pricing activities

**Price Fixing ("collusion")**

**Predatory pricing**

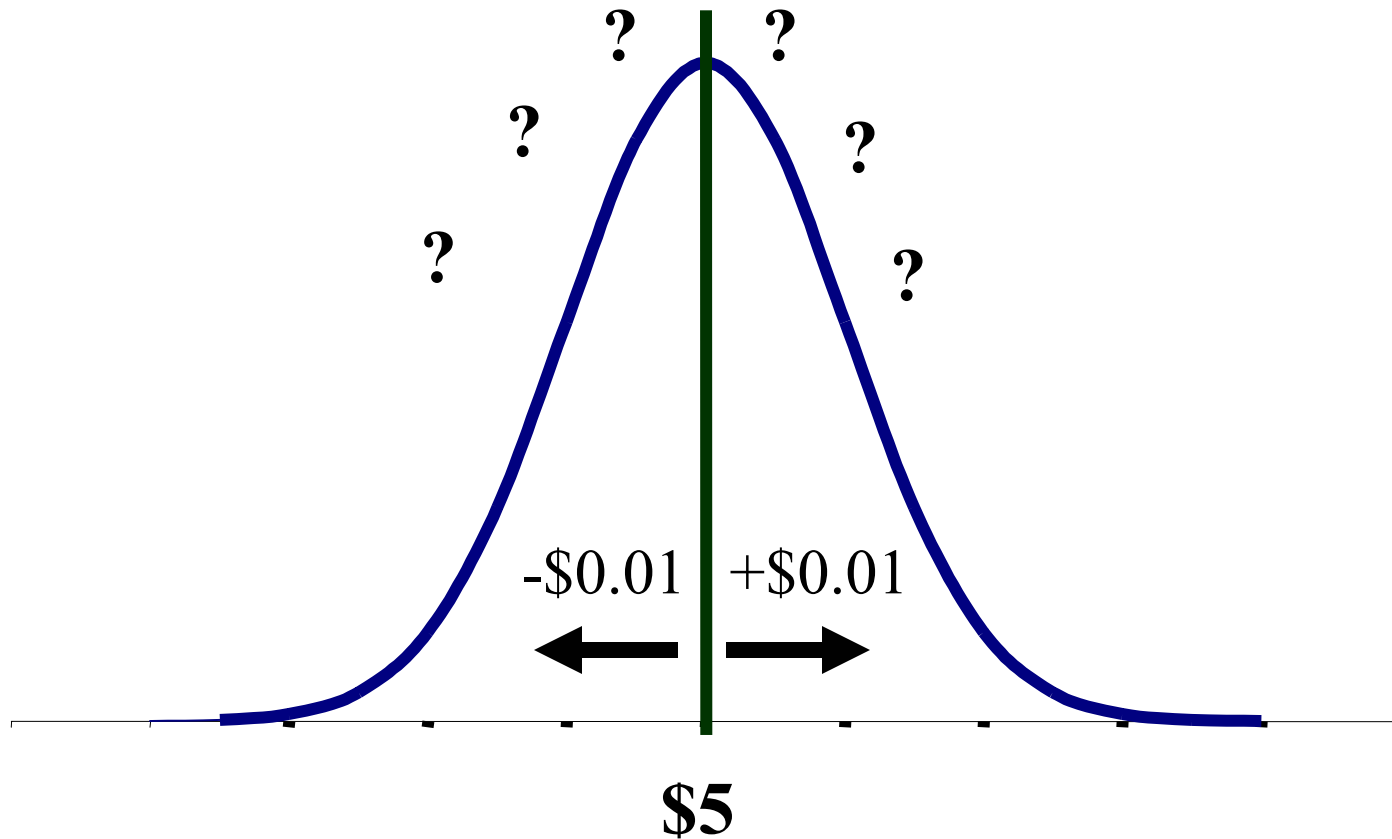
**Bait and Switch**

**Deceptive pricing**

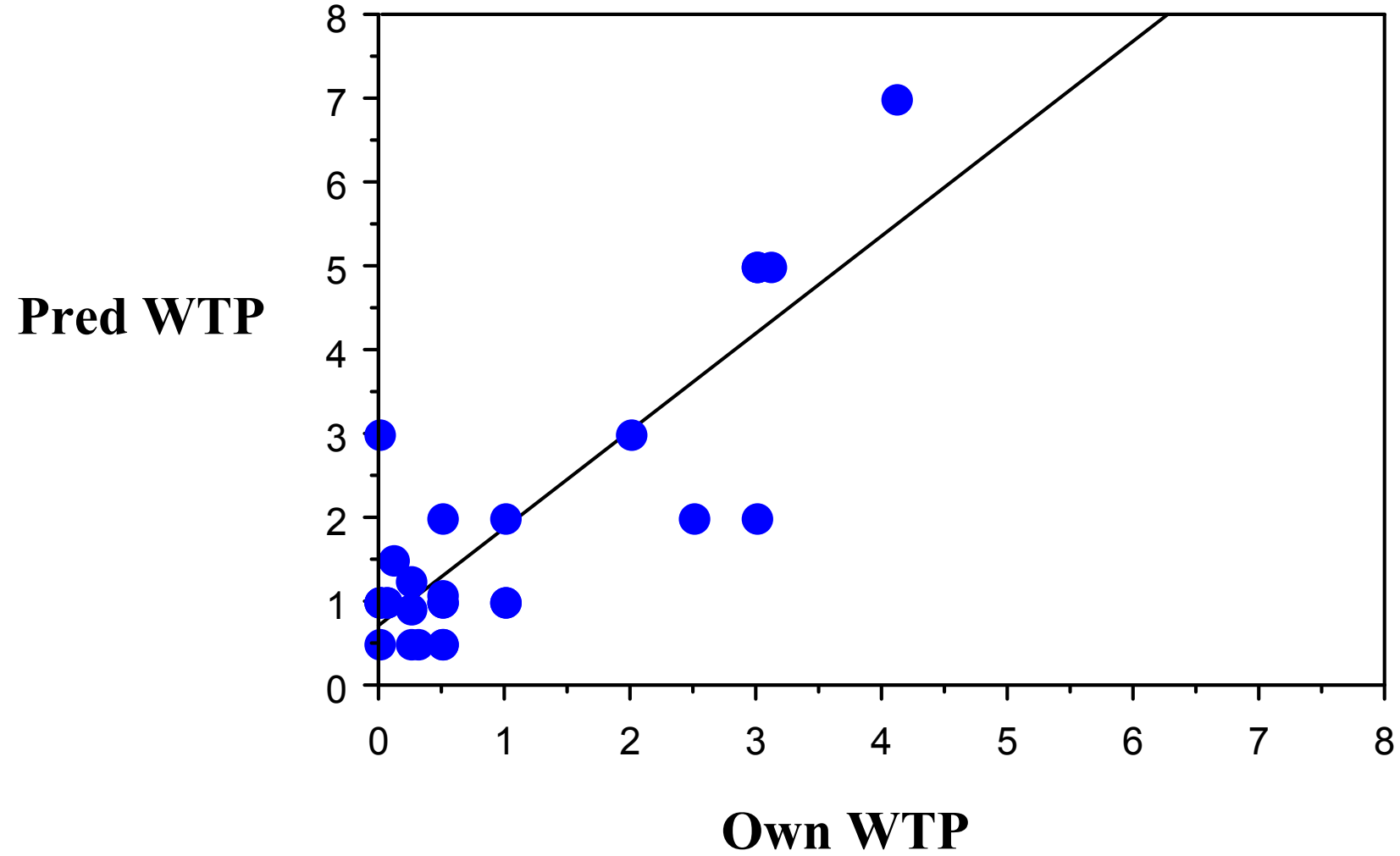
- 8:00 am  8:01 am  8:02 am  SALE! \$100  
50% off!

- tinted windows = \$130
- rack & pinion steering = \$380
- **ADM = \$330**

# Are integer bids optimal?



# Squeezeball



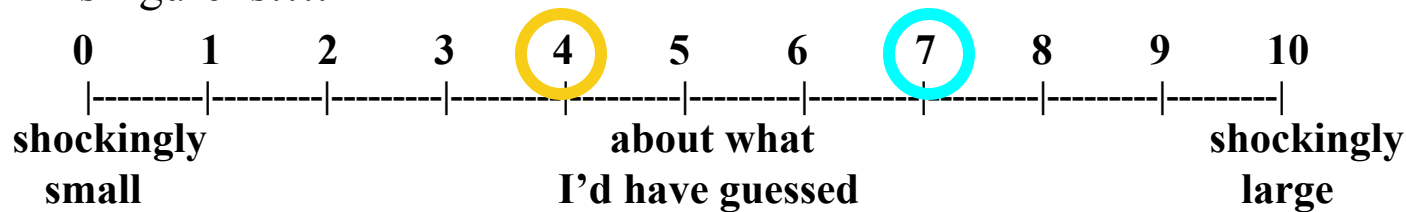
# The effects of aggregation on perception:

"Pennies a day" and related effects

**Fact: The average American eats 1.9 hot dogs per week.**

**Fact: The average American eats 95 hot dogs per year.**

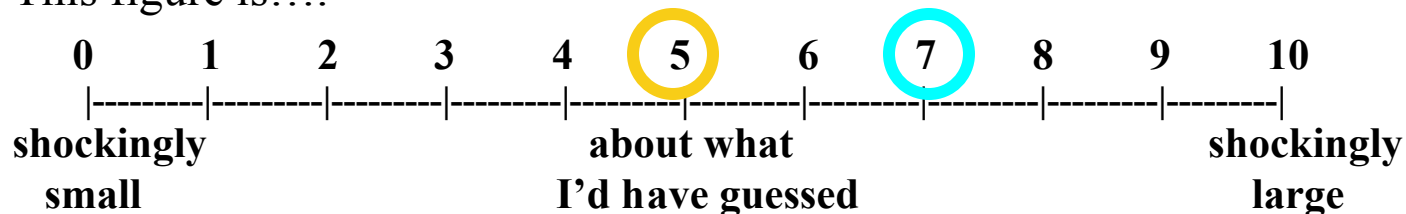
This figure is....



**Fact: The average person generates 4 pounds of garbage per day.**

**Fact: The average person generates 120 pounds of garbage per month.**

This figure is....



# marketing implications

- *Jennifer* convertibles: "If you can afford this [bottle of Evian], then you can definitely afford one of these [picture of waterbed; sleep in comfort for only \$1.50 a night]"
  - "For less than the cost of a postage stamp, you can address a bowl of *Kellogg's* cornflakes"
  - NEA: Supporters: 64 cents a citizen; Opponents: \$168 million a year
  - magazines: "\$1.40 per issue" vs. "\$15 a year."
  - charity/donations: "Only 85 cents a day" vs. "Only \$300 a year."
  - phone companies: "Save \$11.75 a month!" vs. save "\$100 a year"
  - ATT: Why switch to save a few cents a minute; stay with someone you can trust
  - MCI: Why throw away \$100's a year; switch to MCI.
- 
- **\*\*The effect reverses when large amounts are used\*\***
  - Apartments: \$56 a day vs. \$1700 a month