Chapter 14

Pricing Concepts For Establishing Value (Part I)

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Today's concepts

- List the four pricing orientations
- Explain the relationship between price and quantity sold
- Explain price elasticity
- Describe how to calculate a product's break-even point
- Indicate the four types of price competitive levels

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What is price?

Price is NOT just what you pay - it's everything that you, as a consumer, give in exchange for the product you purchase (time, effort in finding it, effort spent researching it)

Uber example

Desperation

- How much battery is left on a traveler's cell phone can help predict whether or not people are going to accept surge pricing!

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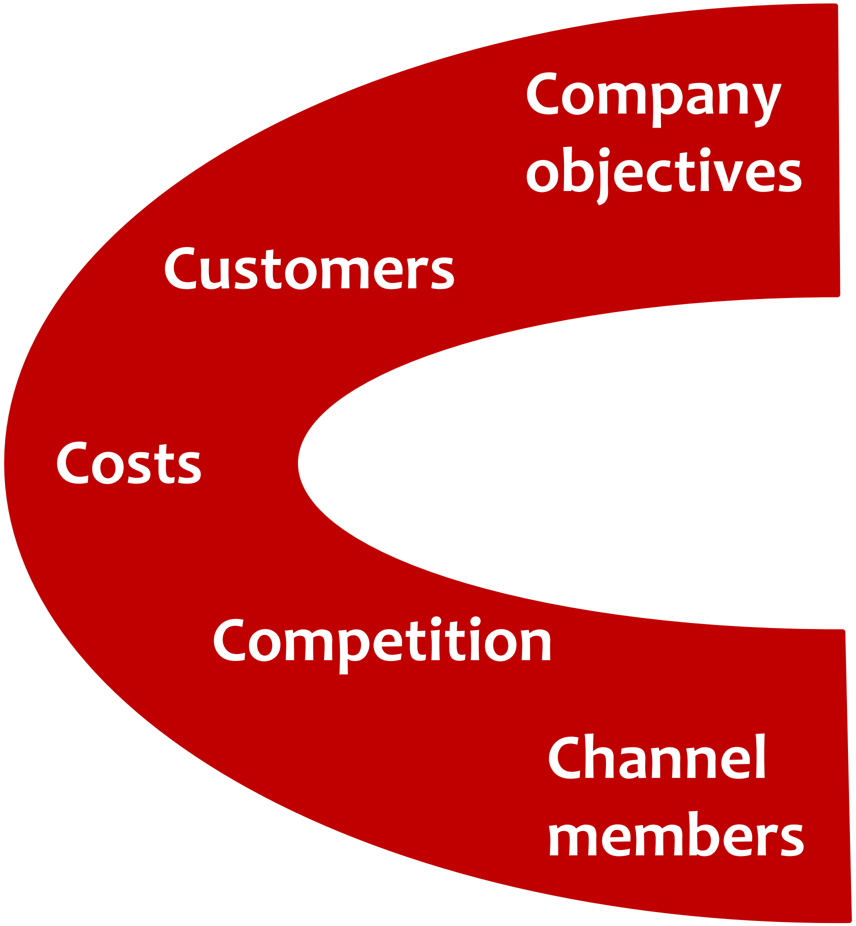
The 5 C's of Pricing



1.Company objectives

Profit oriented

Target profit pricing → Set profit goal

Example:

Companywide policy that all products must provide for at least an 18% profit margin to reach a particular profit goal for the firm

- Starbucks 1% price increase in 2013 http://www.priceintelligently.com/blog/bid/184451/How-Starbucks-Uses-Pricing-Strategy-for-Profit-Maximization

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1.Company objectives

Sales oriented

Set prices to increase sales

– Generally short term strategy

Example:

Set prices very low to generate new sales and take sales away from competitors, even if profits suffer

– Launch of a new product

1.Company objectives

Competitor oriented

Firms that measure themselves against their competitors

- Set prices similar to competitors

Example (generally product with little differentiation):

- Coke and Pepsi
- Airlines

1.Company objectives

Customer oriented

Set prices to add value to product/services

- Set high prices to set customers perceptions, e.g., Apple, Rolex
- Could be a problem if quality is low!

Example:
Target a market segment of consumers who highly value a particular product benefit, and set prices relatively high (premium pricing)

- Fashion industry
- Luxury goods

1.Company objectives

What’s the goal of this ad?

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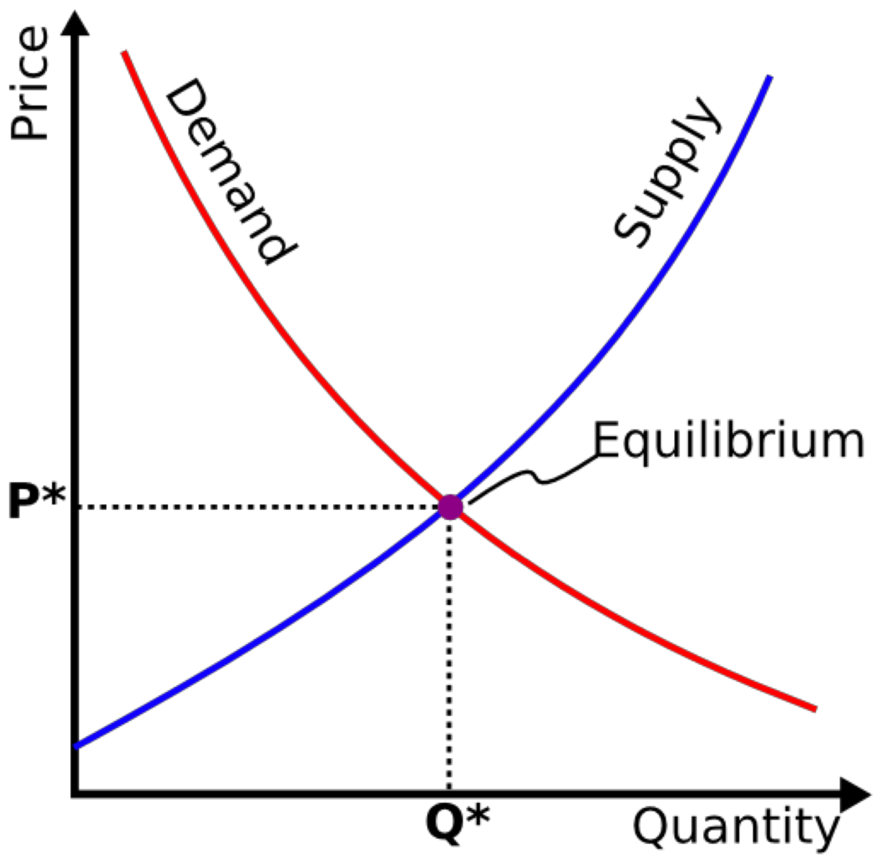
Plays with consumers expectation by comparing the purchase of a very familiar product to that of Zipcar

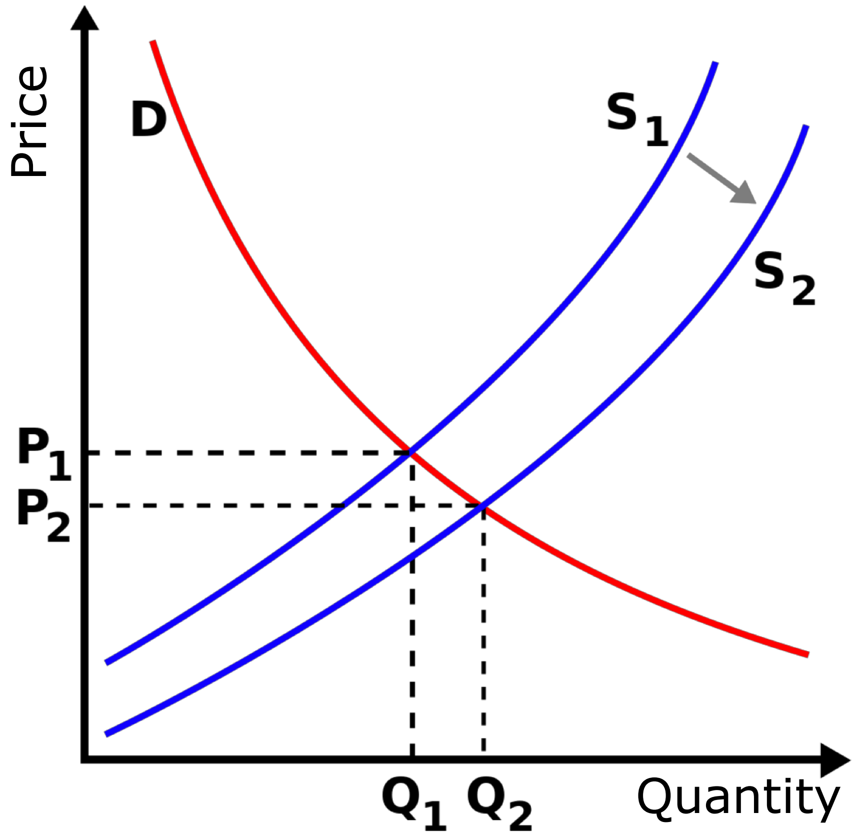
Supply - Demand Curve



Demand is the quantity of a product that buyers are willing to purchase at various prices.

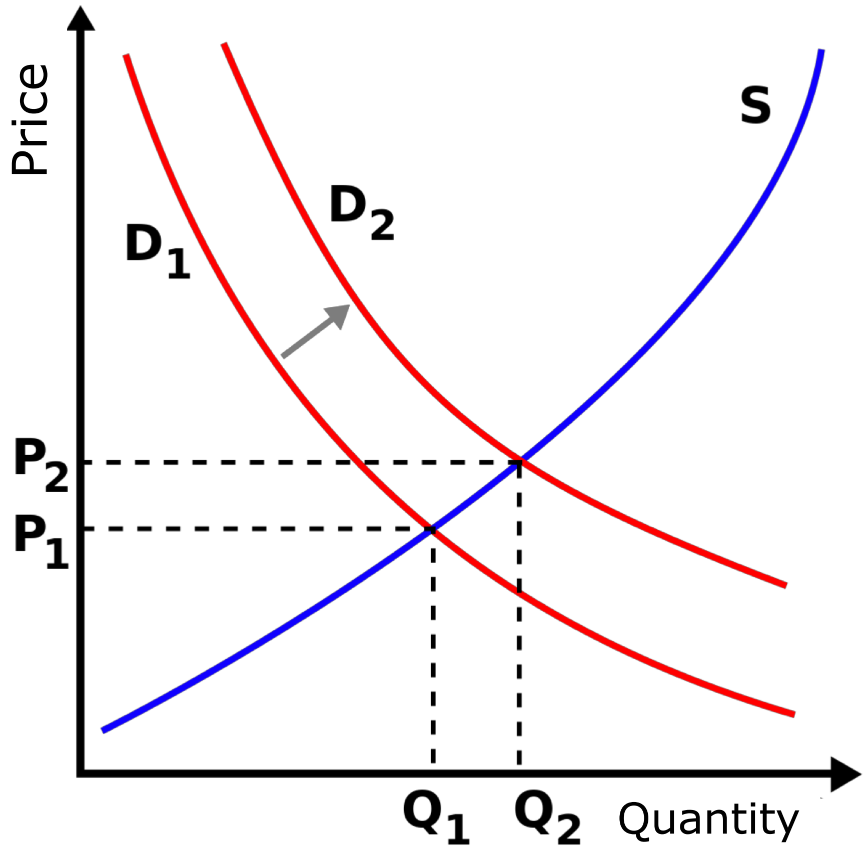
Supply is the quantity of a product that sellers are willing to sell at various prices.

Supply - Demand Curve: Supply shifts



2.Customers

Supply - Demand Curve: Demand shifts



2.Customers

Demand curve and pricing

- Note: not all demand curves are downward trends!
- Prestigious product or services have upward trends

2.Customers

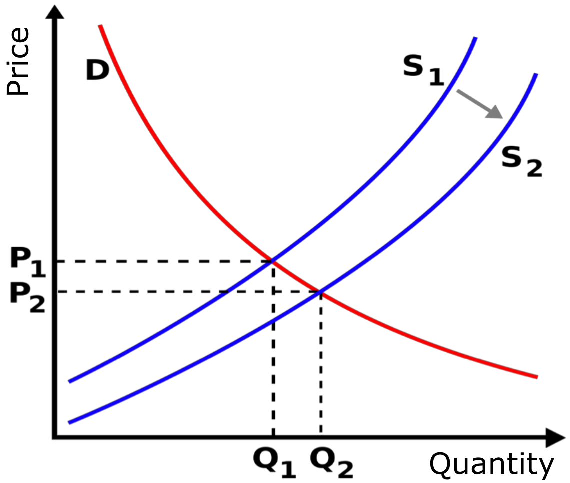
Price elasticity of demand:

- How changes in price affect quantity demanded

$$\boldsymbol{Price\ Elasticity = \frac{Pct.Change\ in\ Quantity}{Pct.Change\ in\ Price}}$$

Price elasticity of demand

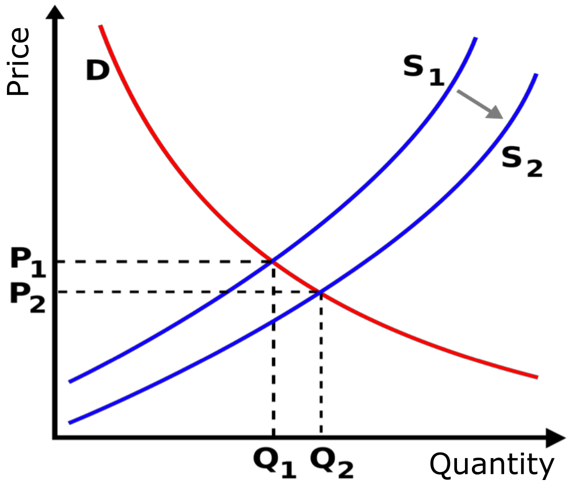
- Example



$$P_1 = \$10 \qquad P_2 = \$5$$
$$Q_1 = 0.5M \qquad Q_2 = 0.75M$$

Price elasticity of demand

- Example



$$P_1 = \$10 \qquad P_2 = \$5$$
$$Q_1 = 0.5M \qquad Q_2 = 0.75M$$

- **Pct. change Q** $= \frac{Q_2 - Q_1}{Q_1} * 100 = \frac{0.75 - 0.5}{0.5} * 100 = 50\%$
- **Pct. change P** $= \frac{P_2 - P_1}{P_1} * 100 = \frac{5 - 10}{10} * 100 = -50\%$
- **Elasticity** $= \frac{\textit{Pct.Change in Quantity}}{\textit{Pct.Change in Price}} =$ -1

Price elasticity of demand

- **Elasticity** = -1
  - 1% decrease in price results in an increase of 1% in quantity demanded

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- Elastic market → price sensitive
  - Small change in price, large change in demand
- Inelastic market → price insensitive
  - Changes in prices have small or no effect on demand

2.Customers

Price elasticity of demand

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  - Small change in price, large change in demand
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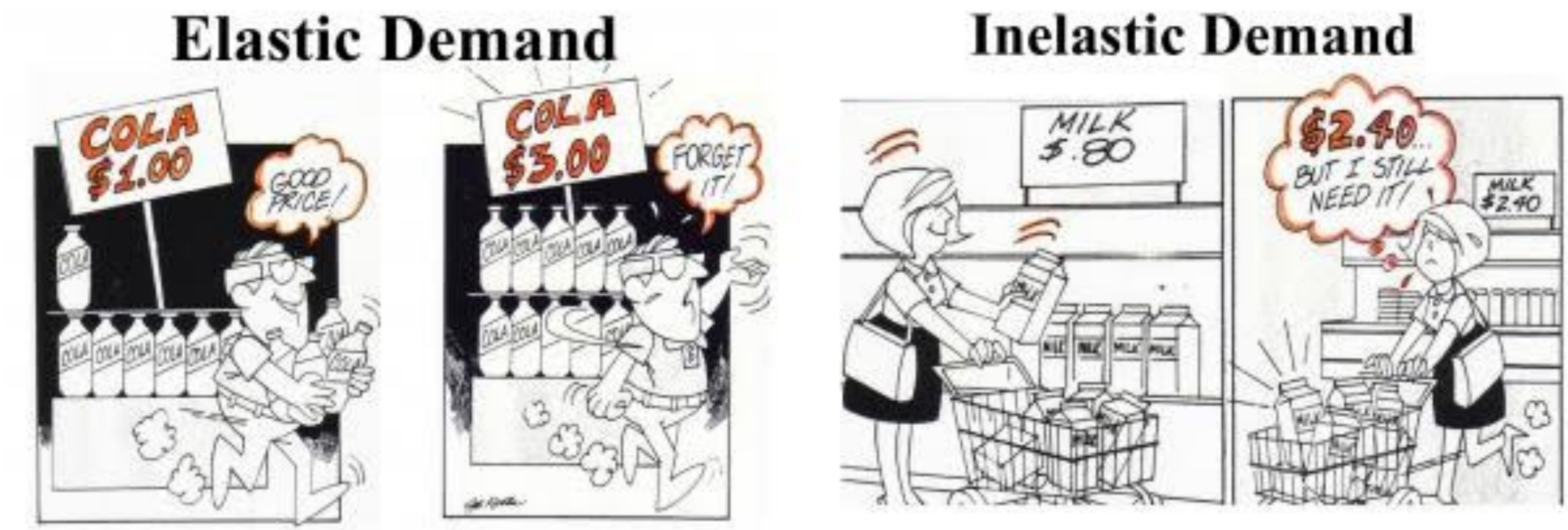
In which markets is it better to raise prices?

2.Customers



Customers are generally less sensitive to primary products (**necessities**)

2.Customers

Factors influencing price elasticity

- Income effect

2.Customers

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Factors influencing price elasticity

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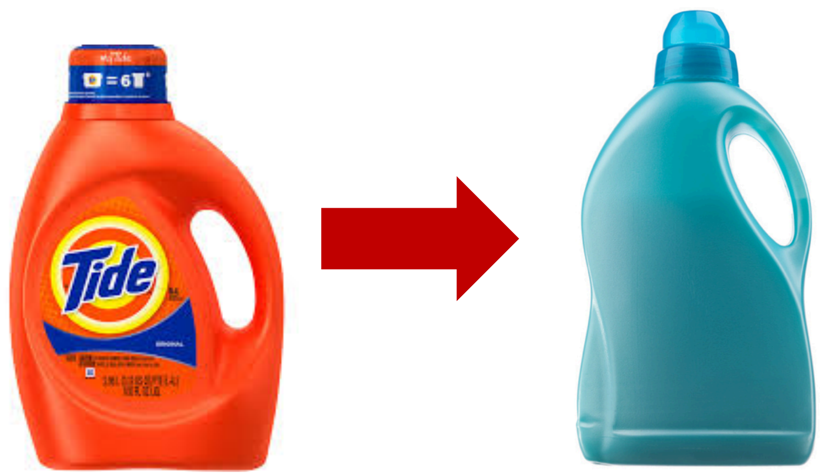
Factors influencing price elasticity

- Substitution effect
  - The greater the availability of substitutes of a product, the higher the price elasticity



3.Costs

To make effective price decisions firms must take into account costs

- Variable costs
  - Vary with production volume
- Fixed costs
  - Unaffected by production volume
- Total costs
  - Sum of variable and fixed costs

3.Costs

Example: Identify hotel’s variable and fixed costs

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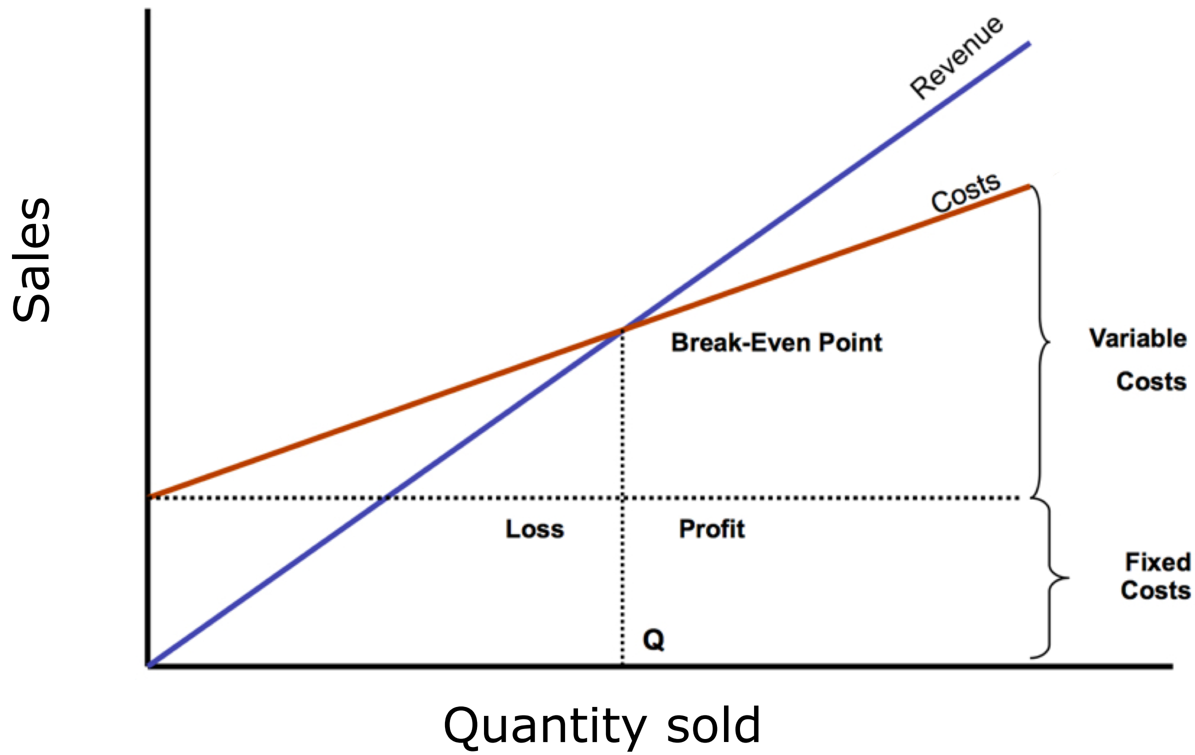
http://setupmyhotel.com/train-my-hotel-staff/front-office-training/187-fixed-cost-and-variable-cost-in-hotels.html

Break-even analysis

Break-even point: # of units to sell in order to cover the total costs

- At this point profit is zero!



Break-even analysis

- Computing break even point

  Revenue = Total costs

3.Costs

Break-even analysis

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  P x Q = fixed costs + variable costs

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  P x Q = fixed costs + variable costs per unit x Q

Break-even analysis

- Computing break even point

  Revenue = Total costs

  P x Q = fixed costs + variable costs

  P x Q = fixed costs + variable costs per unit x Q

- We want to find Q (break-even units):

$$Q = \frac{Fixed\ costs}{\underbrace{P\ - variable\ cost\ per\ unit}_{\textbf{Contribution per unit}}}$$

Break-even analysis

Example 1:

- Suppose that a company sells its products for \$15 each, with variable costs of \$6 per unit and total fixed costs of \$300

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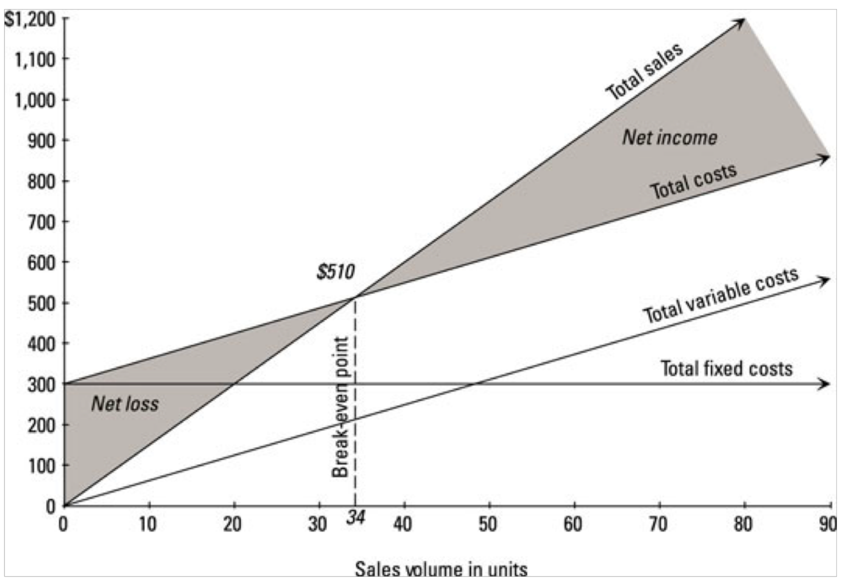

$$Q = \frac{\$300}{(\$15 - \$6)} = 33.3$$

Break-even analysis

Example 2:

- Fixed cost= $100,000
- Variable cost per unit = $10
- Price per unit (P) = $50

Break-even analysis

Example 2:

- Fixed cost= $100,000
- Variable cost per unit = $10
- Price per unit (P) = $50

$$Q = \frac{\$100{,}000}{\$50 - \$10} = 2{,}500$$

Break-even analysis

Computing # of units for target profit

- Example 3:
  - Fixed cost= $100,000
  - Variable cost per unit = $10
  - Price per unit (P) = $50
  - **Firm wants a target profit of $50,000**

Break-even analysis

Computing # of units for target profit

- Example 3:
  - Fixed cost= $100,000
  - Variable cost per unit = $10
  - Price per unit (P) = $50
  - **Firm wants a target profit of $50,000**

$$Q = \frac{\$100{,}000 + \$50{,}000}{\$50 - \$10} = 3{,}750$$

3.Costs

Break-even analysis

Computing profit (more generally):

Profit = P x Q – (fixed costs + variable costs per units x Q)

= Contributions per unit x Q – fixed costs

P = Price per unit, Q = Quantity sold

Profit and loss statement (P&L)

One of the financial statements of a company and shows the company's revenues and expenses during a particular period

- INCOME STATEMENT GREENHARBOR LLC -
For the year ended DECEMBER 31 2010

	Debit	Credit
Revenues		
GROSS REVENUES (including INTEREST income)		296,397

Expenses:		
ADVERTISING	6,300	
BANK & CREDIT CARD FEES	144	
BOOKKEEPING	2,350	
SUBCONTRACTORS	88,000	
ENTERTAINMENT	5,550	
INSURANCE	750	
LEGAL & PROFESSIONAL SERVICES	1,575	
LICENSES	632	
PRINTING, POSTAGE & STATIONERY	320	
RENT	13,000	
MATERIALS	74,400	
TELEPHONE	1,000	
UTILITIES	1,491	

TOTAL EXPENSES		(195,512)

NET INCOME		100,885

Profit and loss statement (P&L)

Operating Revenue	
Product sales	$12,000
Service sales	$3,000
Total Operating Revenue	**$15,000**
Operating Expenses	
Cost of goods sold	$7,000
Gross Profit	**$8,000**
Overhead	
Rent	$1,500
Insurance	$250
Office suppliese	$150
Utilities	$100
Total Overhead	**$2,000**
Operating Income	**$6,000**
Other Income (Expenses)	
Loan interest	($500)
Earnings Before Income Taxes	**$5,500**
Income Taxes	**$500**
Net Earnings	**$5,000**

4.Competition

Prices are affected by the presence and capabilities of competitors

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Prices are affected by the presence and capabilities of competitors

- Pure or Perfect Competition
  - Large number of firms
  - Homogeneous products
  - Easy entry/exit
  - No market power (price taker)
    - Firms accept the prevailing prices

4.Competition

Prices are affected by the presence and capabilities of competitors

– Monopoly
  - One firm in the market (e.g., city, regional area, and doesn’t necessarily have to be an entire country)
  - Unique product
  - Blocked entry (e.g., limited by government)
  - Significant market power

4.Competition

Prices are affected by the presence and capabilities of competitors

– Oligopoly

- Few large firms supply a sizable portion of products in the market
- Homogenous or differentiated products
- Significant barriers to entry (costly)
- The market power of a firm depends on the actions of the other firms in the industry

4.Competition

Prices are affected by the presence and capabilities of competitors

- Monopolistic (imperfect) competition
  - Large number of firms
  - Differentiated products—products that differ slightly but serve similar purposes→ products are not perfect substitutes
  - Low barrier to entry
  - Some degree of market power

4.Competition

	Less price competition	More price competition
Fewer firms	Monopoly	Oligopoly
More firms	Monopolistic competition	Pure competition

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5. Channel members

Manufacturers, wholesalers, retailers

- They can have different perspectives on pricing strategies

- Example: Manufacturer and retailer
  - They agree on a min price to sell TVs but the retailer has too many and in order to move them, he sells them at a non-authorized price!

Recap

Price is affected by many factors

- The company objective of the firm: Profit? Sales?
- Which customers the firm is targeting?
- Firm costs: variables and fixed
- Competitions: is there someone else selling a similar product to mine?
- Channel members (manufacturers, wholesalers, retailers)

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Attendance Quiz

- List the 5 C's of pricing