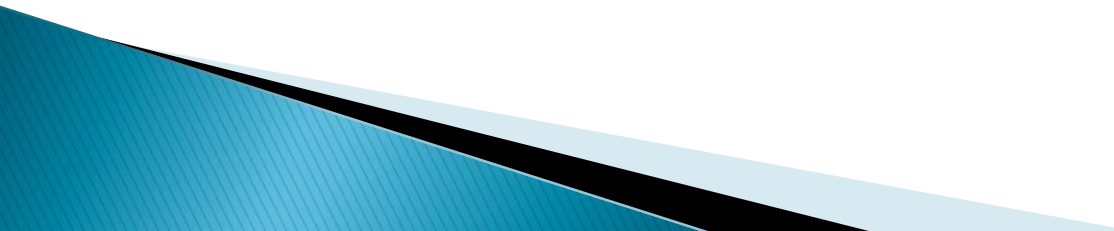



§4-3

Cost, Revenue, & Profit Functions

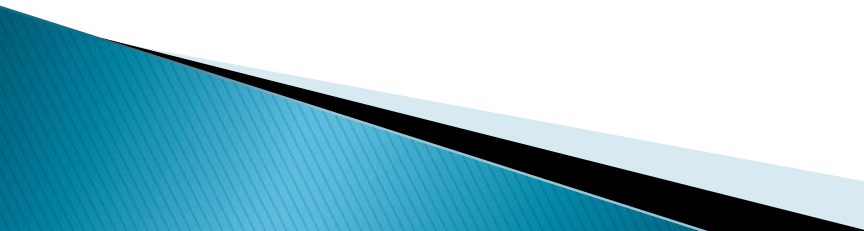
Goals:

- ▶ Find out how competition works
 - ▶ Find profit & loss from sales
 - ▶ Use cost, revenue & profit functions
- 

Competition

- ▶ Rivalry among sellers for consumers' dollars
 - ▶ Rivalry among producers for the factors of competition
 - ▶ Competition keeps producers from charging unreasonably high prices
- 

Competition

- ▶ For competition to work:
 - ▶ There should be a large # of buyers and sellers
 - ▶ Buyers should be informed about the quality and price of products
 - ▶ Buyers should have choices
 - ▶ New products should have easy entry into the marketplace
- 

Revenue

- ▶ The money that a business receives from customers for its products and services

Profit

- ▶ Is the difference between revenue and costs

Fixed Costs

- ▶ Costs that remain the same each week for a business

Variable costs

- ▶ Costs that change according to how many items are produced, includes materials and packaging, etc.

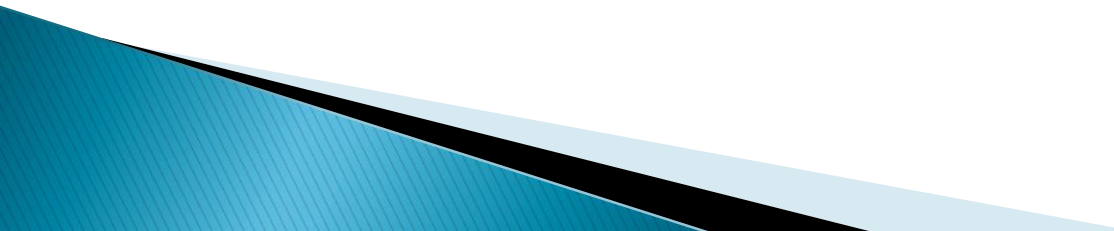
Unit cost

- ▶ Cost per item(unit)

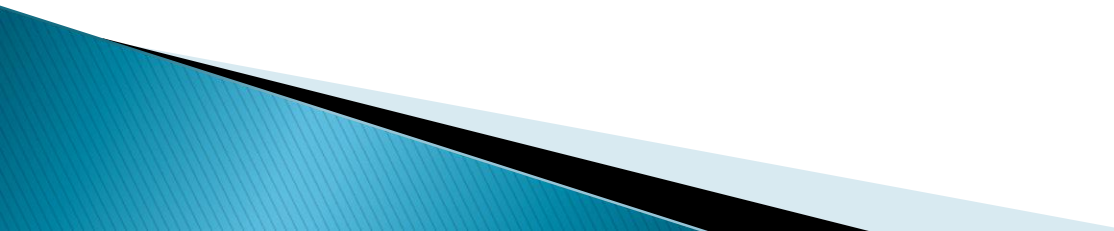
Unit price

- ▶ The price per item(unit)

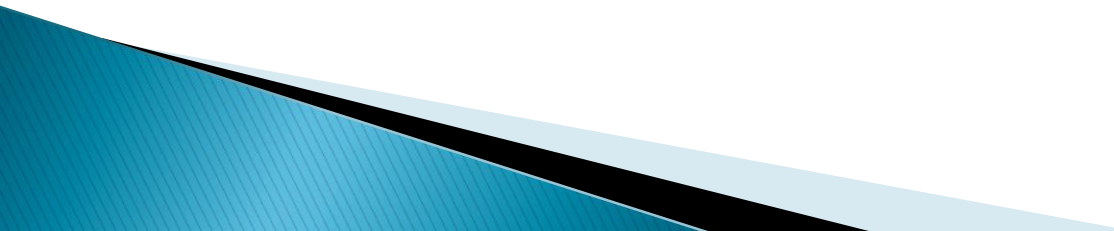
Cost function

- ▶ $C = un + f$
 - ▶ $C =$ total cost
 - ▶ $U =$ unit cost
 - ▶ $N = \#$ of units
 - ▶ $F =$ fixed costs
- 

Revenue Function

- ▶ $R = sn$
 - ▶ $R = \text{total revenue}$
 - ▶ $S = \text{selling price per unit}$
 - ▶ $N = \# \text{ of units sold}$
- 

Profit Function

- ▶ $P = r - c$
 - ▶ $P =$ total profit
 - ▶ $R =$ revenue
 - ▶ $C =$ total cost
- 

Example

- ▶ What is the profit if you sell 32 widgets at \$4 each, and the cost function is $C = 2.5x + 28$?

Homework

▶ P153 AR #1-6

▶ P157-158 TYS #1-12