**Supply & Demand – NOTES**

Name: _____   Date: _____

How do manufacturers decide the quantity of a product they will produce?

- Economists often call a new, unnamed product a _____.
  If a business develops a new product, the number of items they need to
  manufacture is a key question they need to address.

- To answer this question, graphs that compare the _____

  _____

  are used.

- A _____ shows that the lower
  the price, the higher the demand. As the price increases, the demand decreases.
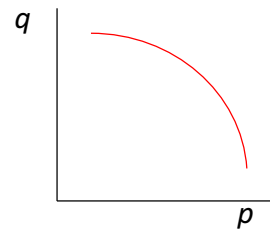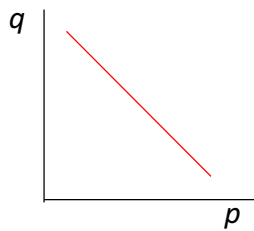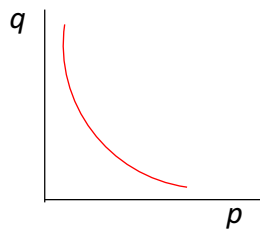
  o The slopes of demand functions are _____.

- A _____ shows that when a widget sells for a high price, manufacturers may produce more items to maximize profit. If it sells for a lower price, manufacturers may produce less.

q q q

p p p
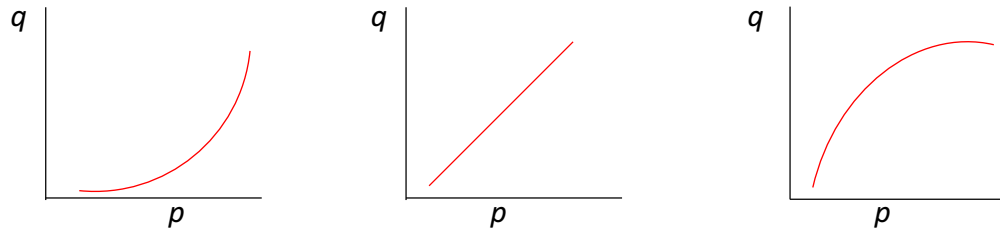
  - The slopes of supply functions are _____.

- Remember that manufacturers sell their items to retailers, not to the general public. The price the manufacturer charges the retailer is the

  _____.

- Retailers increase the price a certain amount, called _____, so the retailer can make a profit. The price the retailer sells the item to the

  public for is the _____.

- The supply and demand functions are often graphed together on the same graph to help determine the price of an item and how much of the item to make.
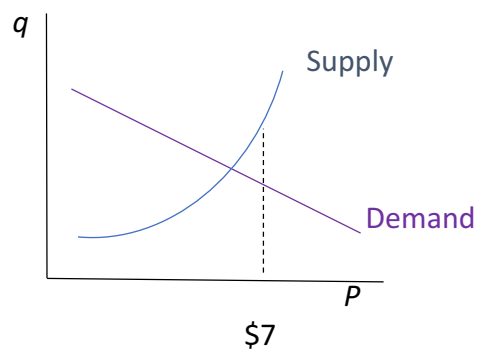
Situation #1: Price = $3

q

Supply

Demand

p

$3
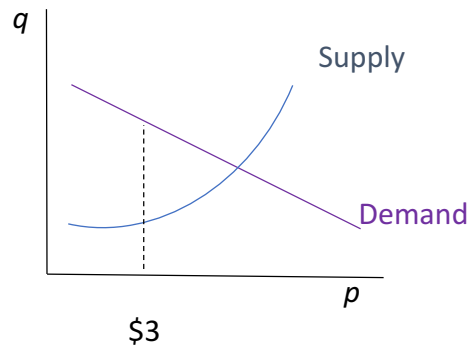
If an item is priced too low, manufacturers won't be able to meet the demand. (This is bad because they're not making as much money as they could be making).

This is called a _____.

Situation #2: Price = $7
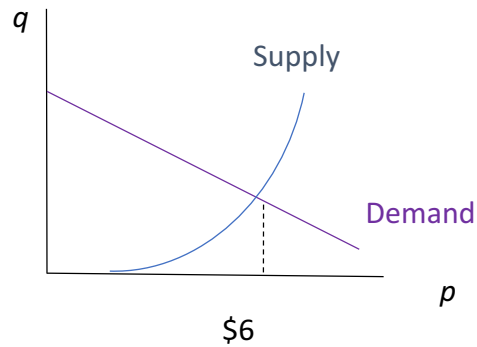
q

Supply

Demand

P

$7

 If an item is priced too high, manufacturers will have too much of that item and will not be able to sell it. (This is bad because they wasted money creating unwanted products)

This is called a _____.
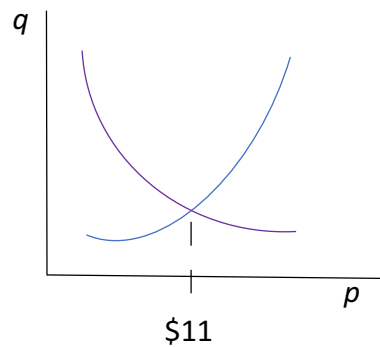
Situation #3: Price = $6

$6

When the supply and demand functions intersect, everyone is happy. ☺

This is called _____.

Examples:

1) A company sells teddy bears at a wholesale price of $23.00. If a store marks this up 110%, what is the retail price?

2) The graph below shows the supply and demand curves for a widget. Explain what happens if the price is set at $9.00.

$11

3) A company wants to base the price of its product on the demand for that product, as well as on expenses to make it. It takes a poll of several of its current retailers to find out how many widgets they would buy at different wholesale prices. The results are shown in the table. The company wants to use linear regression to create a demand function. What is the equation of the demand function?

Wholesale Price ($) (p)	Quantity Demanded by Retailers (in hundreds) (q)
13.00	744
13.50	690
14.00	630
14.50	554
15.00	511
15.50	456
16.00	400
16.50	300
17.00	207
17.50	113