Worksheet 6A

Exercise 1: Create a supply schedule

Your class has been asked to take part in a pilot program in which students are given the opportunity to work part time, before or after school, in the school library. Students hired can decide for themselves how many hours per week they will work, although no student can work more than 25 hours per week.

The librarian is not sure how much money to offer (per hour) to attract enough students to meet the needs of the library so she asks your teacher to conduct a survey of the class by asking students to indicate the number of hours each would be willing to work at different hourly rates. Complete the table below by indicating how many hours you would be willing to work (assuming you would be hired) at the various rates the library is considering offering.

Hourly rate	# hours you would be willing to work
$30	
$25	
$20	
$15	
$10	
$7	
$5	
$3	
$2	
$1	

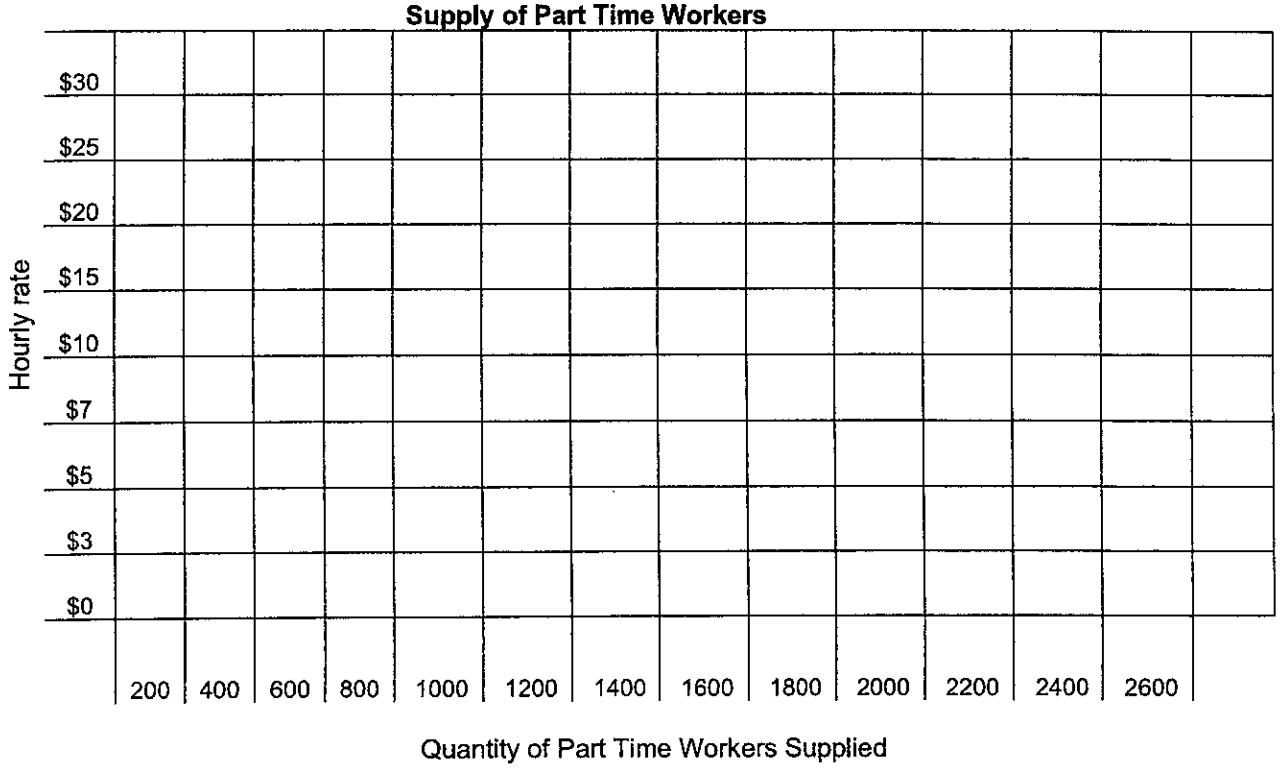
Worksheet 6B

Exercise 1: Create a supply curve

The survey to assess students' willingness to work at the library was distributed to all seniors in the school; the total hours that students are willing to work at the different hourly rates are presented in the *supply schedule* for part time workers below:

Supply Schedule for Part Time Workers	
Hourly rate	# hours seniors are willing to work
$30	1500
$25	1440
$20	1380
$15	1100
$10	840
$7	480
$5	240
$3	0
$2	0
$1	0

Using the data in the supply schedule for part time workers, draw the supply curve.



In your own words, summarize the information displayed in the graph

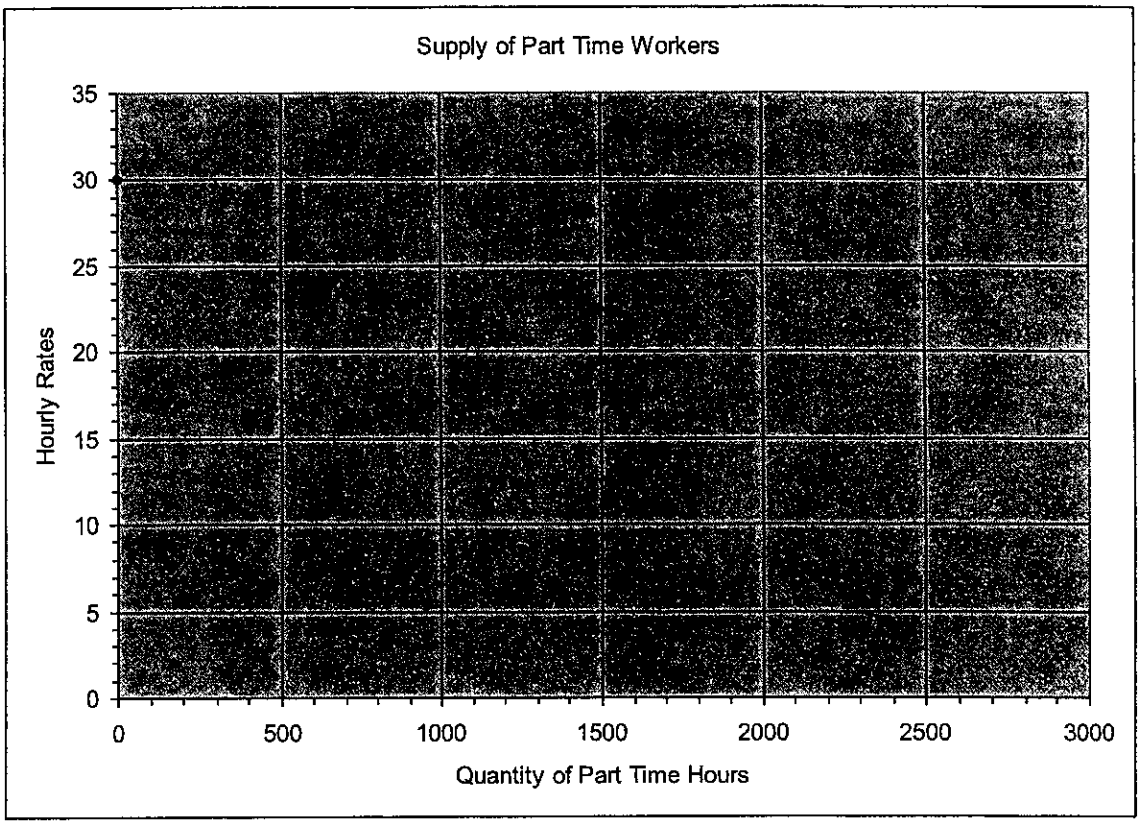
Worksheet 6C

Changes in Supply – A Shift in the Demand Curve

The supply schedule below presents the results of a survey of seniors only, and seniors and juniors, indicating the number of hours these students would be willing to work in the school library at different hourly rates of pay.

Supply Schedule of Student Workers' Hours			
Hourly rate	# hours juniors are willing to work (S1)	# hours seniors are willing to work (S2)	# hours juniors and seniors are willing to work (S3)
$30	1125	1500	2625
$25	1080	1440	2520
$20	1035	1380	2415
$15	825	1100	1925
$10	630	840	1470
$7	360	480	840
$5	180	240	420
$3	0	0	0
$2	0	0	0
$1	0	0	0

Exercise 1: Using the data from the supply schedule for part time workers, draw supply curves S2 and S3 on the graph below.



Refer to the chart you have drawn and answer the following questions:

1. When the hourly rate is $20, compare the quantity of hours students are willing to work at supply levels S2 and S3.
2. When supply increases at all price levels, the supply curve shifts in which direction: right or left?
3. Explain the difference between an *increase in supply* and *increase in the quantity supplied.*
    a. Which is depicted as a movement along the supply curve?
    b. Which is depicted as a shift in the supply curve?

Exercise 2: In the table below, complete the following:

1. Record the affect on supply of each of the four determinants.
2. In each instance, state if the supply curve shifts right or left.
3. In your own words provide an explanation of the suppliers' reactions.

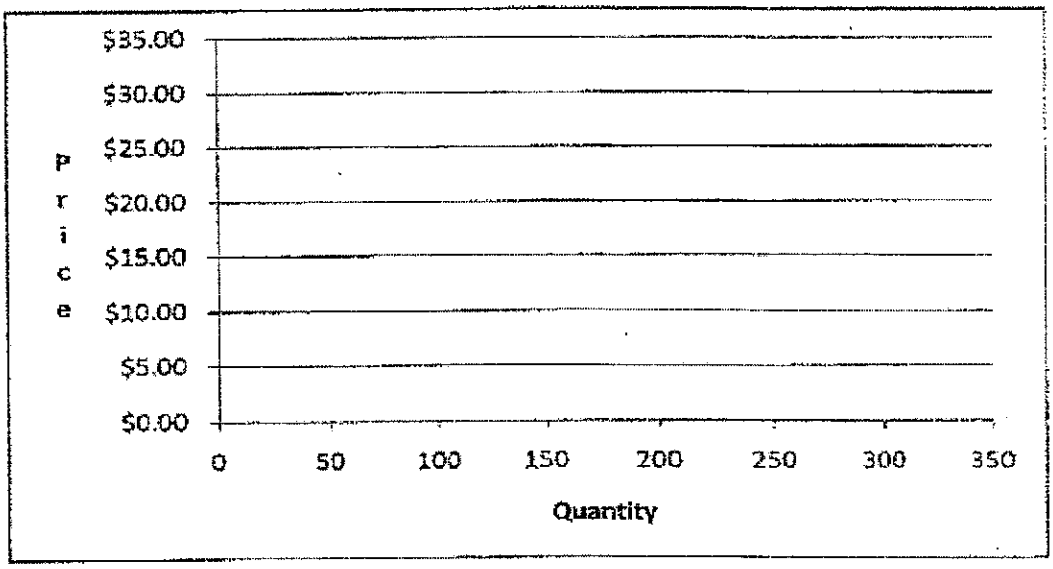
Determinant of supply		**Affect on supply**	**Explanation**
A change in the price of inputs (raw materials, wages, etc.)	A decrease in the price of inputs.		

	An increase in the price of inputs.		
A change in the number of firms in the industry.	Increase in the number of firms in the industry		
	Decrease in the number of firms		
A change in taxes	Increase in taxes		
	Decrease in taxes		
Technology development			

Name_____ Period _____

Demand Curve Worksheet

Quantity Demanded (monthly)	Price (dollars)
50	$30.00
100	$25.00
150	$20.00
200	$15.00
250	$10.00
300	$5.00



Examine the demand schedule and plot the demand curve. Then answer the questions that follow.

1. If the price is $10, how many will people buy? _____

2. If the quantity sold is 200, what is the price? _____

3. What effect does the price have on the quantity sold? _____

_____

Name_____ Period _____

Market Demand

The following table summarizes the number of DVDs four people want to buy each month at different possible prices.

Monthly Demand for DVDs

Price per DVD	Tim	Samantha	Jamal	Felicia	TOTAL
$5	5	10	8	4	
$10	4	9	6	4	
$15	3	9	4	2	
$20	2	6	2	2	
$25	1	5	0	0	
$30	0	1	0	0	

1. Assume that Tim, Samantha, Jamal and Felicia represent the total market. Use the table to calculate the market demand for DVDs.

   A. Show the market demand by filling in the blanks in the last column of the table.

2. Suppose the price of the DVDs rises from $15 to $25.

   A. What happens to the total number of DVDs the four consumers want to buy?

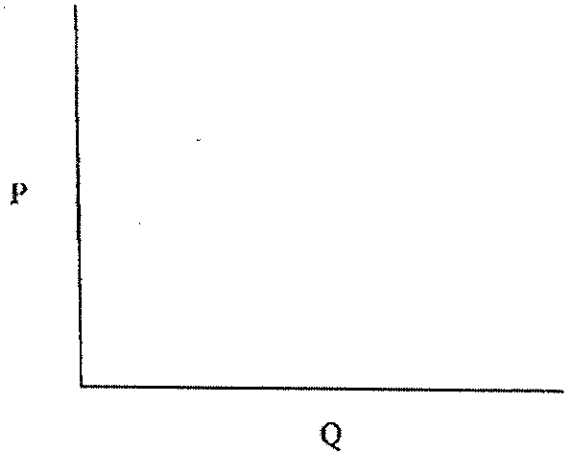
   _____

   B. Is this a change in demand? Explain.

   _____

3. Use the table to plot the market demand for DVDs on the graph below.

Name_____ Period _____



4. Suppose producers decide to lower the price of Blu-Rays to equal the price of DVDs. Will this cause a change in demand for DVDs? Explain.

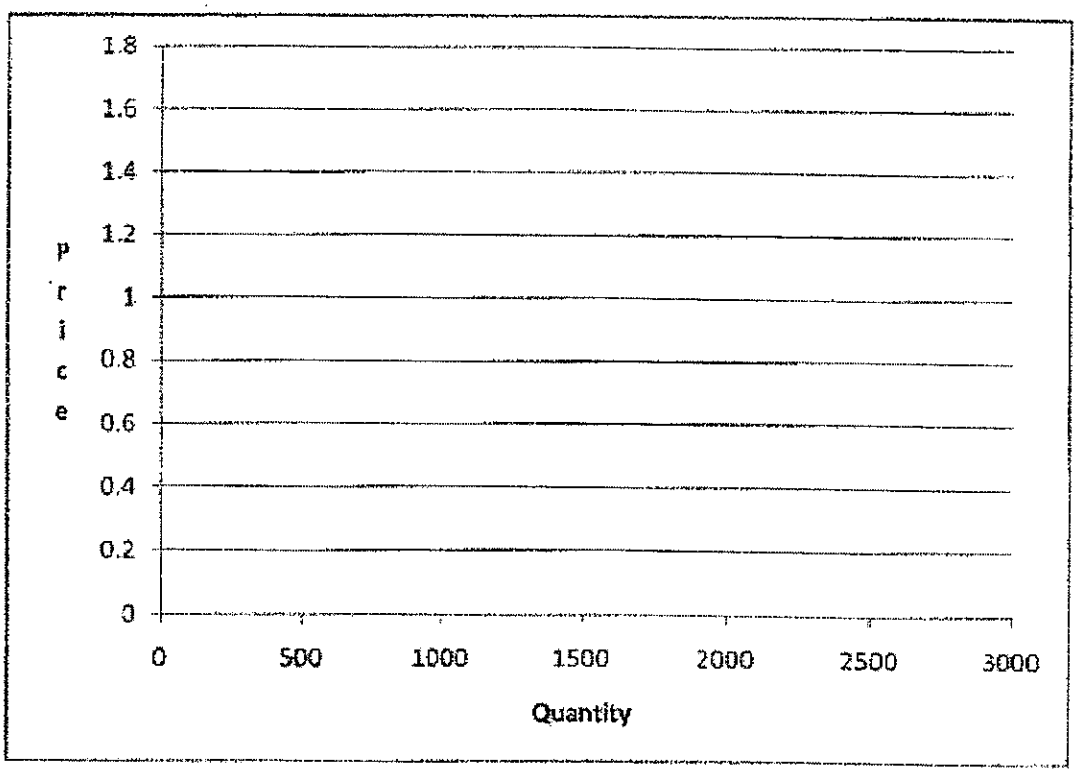
_____

_____

Name_____ Period _____

Supply Curve Worksheet

Quantity Demanded (monthly)	Price (dollars)
3000	$1.60
2500	$1.40
2000	$1.20
1500	$1.00
1000	$0.80
500	$0.60



Examine the supply schedule and plot the supply curve. Then answer the questions that follow.

1. If the price is $1.20, how many will be offered for sale? _____

2. If the quantity offered is 2500, what is the price? _____

3. What effect does the price have on the quantity offered for sale?

_____

Name_____ Period _____

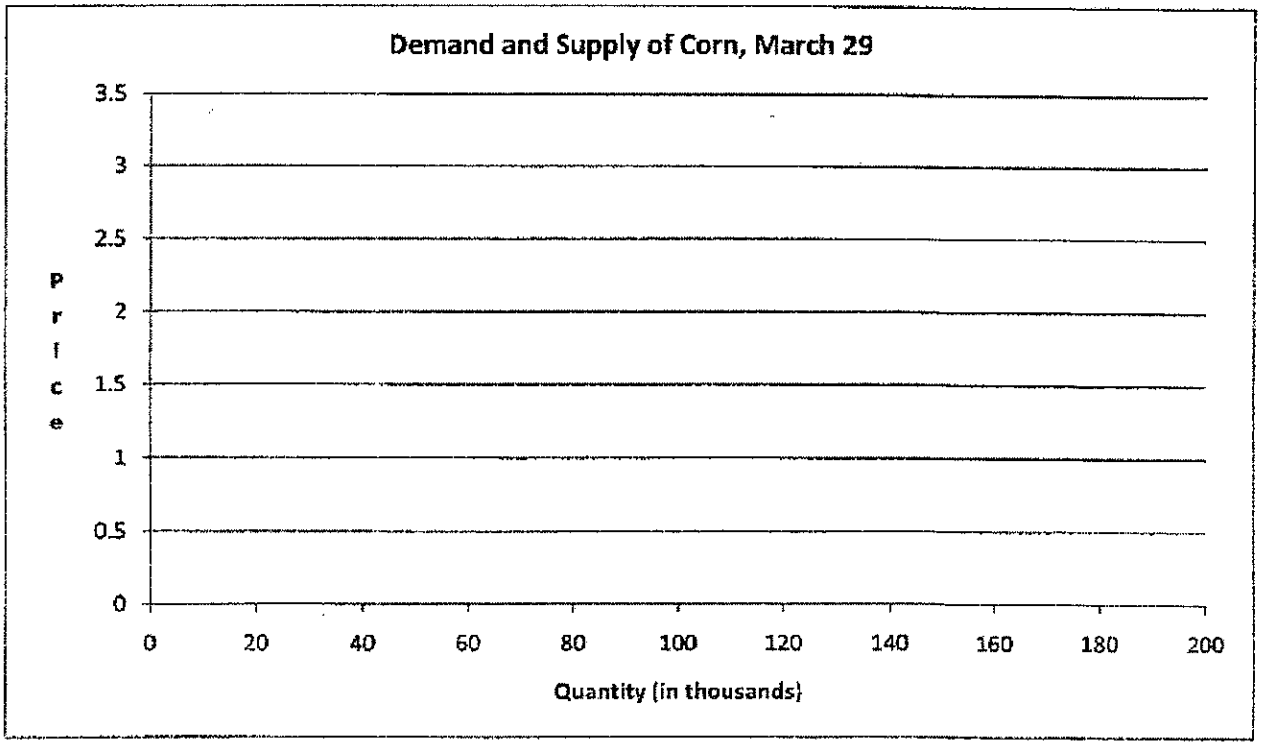
Market Price Worksheet

The following table presents the demand and supply of corn on December 17

Demand and Supply for Corn, 12/17

Price per Bushel	Number of Bushels People Want to Buy (thousands)	Number of Bushels People Want to Sell (thousands)
3.50	80	200
3.25	100	180
3.00	120	160
2.75	140	140
2.50	160	120
2.25	180	100
2.00	200	60

Use the graph below to plot the demand for corn shown in columns 1 and 2 on the table. Connect the points and label the line, D. This will be the demand curve for corn. Draw the supply curve using columns 1 and 3 on the table. Connect the points to complete the supply curve. Label this curve, S.



Name_____ Period _____

1. What is the market price of corn in the graph you have drawn?

_____

2. Suppose the price of corn is $3.25 per bushel. Is there a shortage or a surplus of corn at that price? How big is it?

_____

3. Suppose the price of corn is $2.25 per bushel. Is there a shortage or a surplus of corn at that price? How big is it?

_____

4. If the price of corn is above its market level, there is a surplus. Does this mean corn is no longer scarce? Explain.

_____

_____

Worksheet 6D

Imagine that you have opened a small business in your school selling Italian ices. You make the ices from fresh fruit – lemons, oranges, blueberries and cherries - using a family recipe that your grandfather has passed along. You are concerned about the price you pay for the fruit, as the price you pay for the ingredients is reflected in the price you charge your customers, and you are aware that there is a limit to what your customers are willing to pay. Although you would like to offer variety to your customers, if the price of any of the fruits becomes too high, you will cut back on your purchases, and offer less of that flavor to your customers. The quantity of lemons you are willing to purchase at various prices per bushel is presented in the table below.

The lemon supplier obtains lemons directly from growers in Florida and has a variety of customers that include restaurants, supermarkets and fruit vendors.

The quantity of lemons you are willing to purchase and the quantity of lemons the supplier is willing to offer at various prices per bushel are presented in the table below:

Price per bushel	Quantity demanded (D)	Quantity supplied (S)
$40	20	60
$32	30	50
$24	40	40
$16	50	30
$8	60	20

Exercise 1: For each price per bushel in the table:

- indicate whether there is a shortage (quantity demanded > quantity supplied) or a surplus (quantity supplied > quantity demanded)
- indicate the amount of the shortage or surplus.

Price per bushel	Quantity demanded (D)	Quantity supplied (S)	Surplus or shortage	Amount
$40	20	60		
$32	30	50		
$24	40	40		
$16	50	30		
$8	60	20		

- When a surplus exists:
    - Suppliers respond; the lemon supplier has unsold lemons that will soon go bad.
        1. If the supplier is willing to offer lemons at a lower price, what happens to the quantity of lemons demanded?
        2. What happens to the size of the surplus as suppliers lower the price of lemons?

- When a shortage exists:
    - Suppliers respond; since the lemon supplier is able to sell all the lemons at the current price, this is a good opportunity to raise prices to increase profits. As long as the quantity demanded is greater than quantity supplied, suppliers can continue to raise prices.
        1. What happens to the quantity of lemons demanded as suppliers raise the price?
        2. What happens to the size of the shortage when suppliers raise the price?
    - Consumers respond; since at these prices the supply of lemons is less than demand, those who value the lemons the most are willing to pay more if they have to obtain lemons. Everyone does not value lemons equally. Consumers who value lemons the most will be willing to pay more.
        1. What happens to the quantity of lemons demanded as the price increases?
        2. What happens to the size of the shortage as the price of lemons increases?
- At equilibrium (when there is neither a shortage nor a surplus):
    - Supply and demand is in balance, there is no pressure to change.
        1. Can you explain why there is no pressure for the equilibrium price to change?
        2. Can you think of events that would disturb this equilibrium?