

Figure 7.7 Graphing the Supply Curve

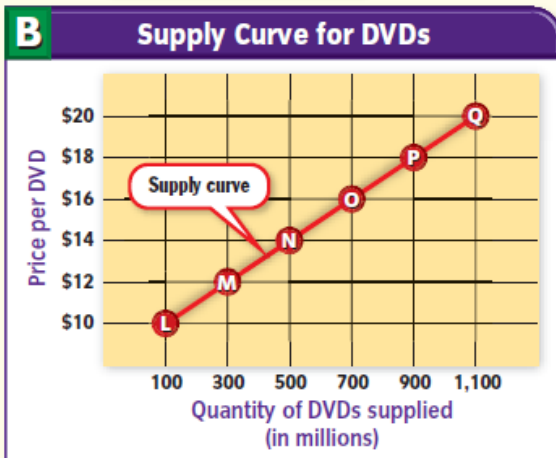
■ Note how each of the two graphs uses a different format to show the same thing. Each shows the law of supply—as price rises, quantity supplied increases.

Table A. Supply Schedule

The numbers in this supply schedule show that as the price per DVD increases, the quantity supplied increases. At \$16 each, a quantity of 700 million DVDs will be supplied.

Price per DVD	Quantity Supplied (in millions)	Points in Graph B
\$10	100	L
\$12	300	M
\$14	500	N
\$16	700	O
\$18	900	P
\$20	1,100	Q

Graphs in Motion
See StudentWorks™ Plus or go to glencoe.com.

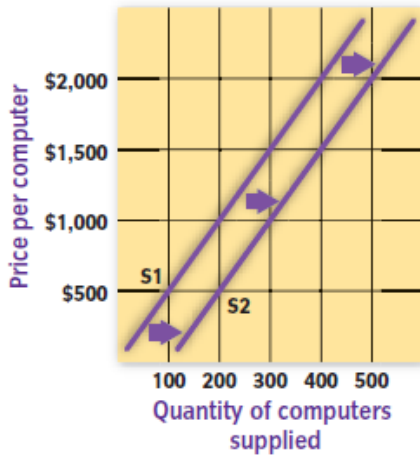


Graph B. Supply Curve Here the price and quantity supplied figures from the supply schedule have been plotted on a graph and connected with a line. This line is the *supply curve*, which rises from left to right.

Economic Analysis

Using Graphs According to the supply curve, how many DVDs will be supplied at a price of \$14 each?

If Inputs Become Cheaper

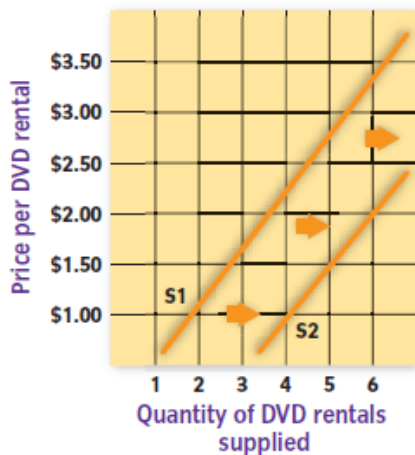


Price of Inputs If the price of the inputs needed to make a product—raw materials, wages, and so on—drops, a producer can supply more at a lower production cost. This causes the entire supply curve to shift to the right. This situation occurred, for example, when the price of memory chips used in making computers fell during the 1980s and 1990s. Look at the graph on the left. Line S1 shows the supply of computers *before* the price of memory chips fell. Line S2 shows the increased supply of computers *after* the price of memory chips fell. After the price drop, more computers were supplied at any given price than before.

In contrast, if the cost of inputs increases, then the cost of production also increases, and suppliers will offer fewer goods for sale at every possible price.

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If Number of Firms Increases



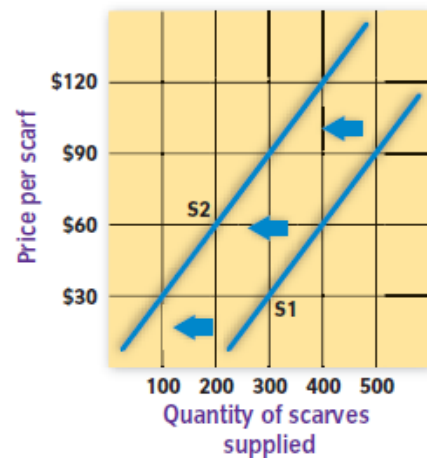
Number of Firms in the Industry As more firms enter an industry, greater quantities of their product or service are supplied at every price, and the supply curve shifts to the right. The larger the number of suppliers, the greater the market supply. Consider DVD rentals, for example. If profits from movie and game rentals increase, the number of DVD rental stores supplying these items will increase as well. As more DVD rental stores enter the market, the supply curve for DVD rentals shifts to the right. This shift is shown in the graph on the left.

Conversely, if some suppliers leave the market, fewer quantities of their product or service are supplied at every price, and the supply curve shifts to the left. Sellers in a free-market economy are entering and leaving the market all the time.

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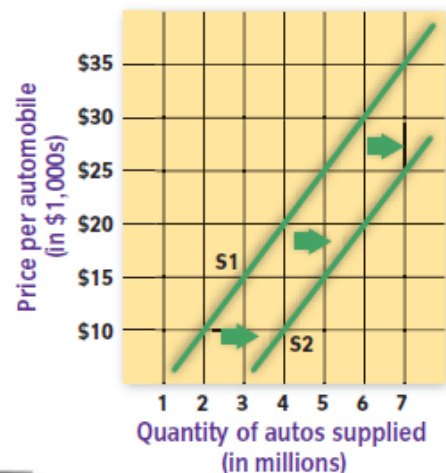
Taxes If the government **imposes** more taxes on the production of certain items, businesses will not be willing to supply as much as before because the cost of production will rise. The supply curve for products will shift to the left, indicating a decrease in supply. For example, if taxes on the production of silk scarves increased, businesses that sell silk scarves would supply fewer quantities at each and every price. Look at the graph on the right. Line S1 indicates the supply of silk scarves *before* the government raised taxes on this product. Line S2 equals the supply *after* the government raised taxes. Because of the increased cost of production caused by the taxes, the entire supply curve for silk scarves shifted to the left.

If Taxes Increase



Technology The use of science to develop new products and new methods for producing and distributing goods and services is called **technology**. Any improvement in technology will increase supply, as shown in the graph on the right. This is because new technology usually allows suppliers to make more goods for a lower cost. The entire cost of production is cut, and the supply curve shifts to the right.

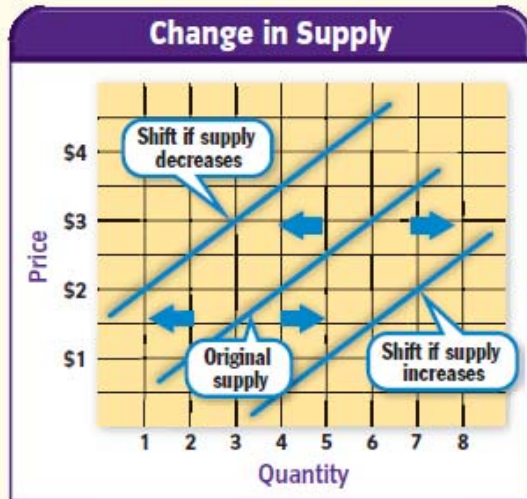
If Technology Improves Production



Reading Check Analyzing What happens to the supply curve when production costs increase?

Figure 7.8 Supply vs. Quantity Supplied

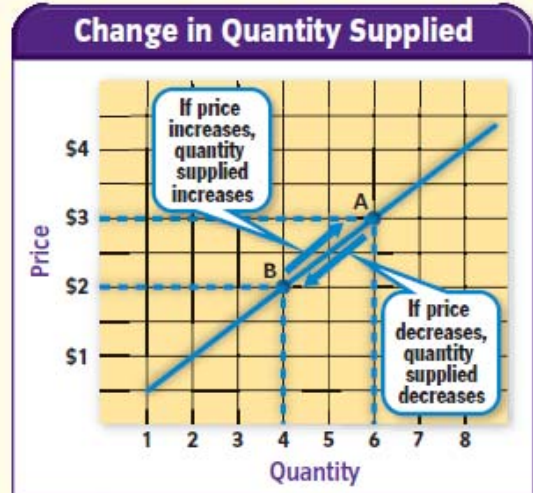
Remember that there is a difference between a *change in supply* and a *change in quantity supplied*.



Graph A. Change In Supply This is caused by something other than price, and it causes the entire supply curve to shift to the left or right.

Graph B. Change in Quantity Supplied

This is caused by a change in the price of a good and it is shown as a movement *along* the supply curve.



Economic Analysis

Figure 7.9 Diminishing Returns

Normally after some point, if you are expanding production, the additional workers that you hire do not add as much to total output as the previous workers that you hired. Eventually, adding more workers will not produce additional output.

Economic Analysis

Using Tables If you start with 12 workers and hire 6 more, by how many units will your additional output decrease?



Diminishing Marginal Returns

Number of Workers	Additional Output
11	1,000
12	900
13	800
14	700
15	600
16	500
17	400
18	300
19	200
20	100
21	0