

ACTIVITY 14.1

STOMPING GROUNDS: BUYERS

Coffee is your favorite drink. For you and everyone in your family, a good day begins with a nice fresh cup.

Stomping Grounds, Inc. is a new coffee shop. You stopped there recently and loved the coffee. Amy Donald, the owner, is trying to decide how many cups of Stomping Grounds coffee customers like you are willing to buy at different prices. How many cups of Stomping Grounds coffee would you buy each week?

Your answer would probably depend on the price per cup. Read the table below. For each of the prices listed, estimate the maximum number of cups you would buy per week. Begin at the bottom of the table. Suppose Amy is giving away coupons for free cups of coffee. In the bottom blank, opposite \$0, enter the maximum number of cups you would want to have per week if the coffee was free. Then go to the next price, \$1. Write the maximum number of cups per week you might buy if you had to pay \$1 for each cup. Then make similar estimates for each of the other prices. If you would not buy any cups at a particular price, write a zero in the blank next to that price.

Prices for One Cup of Stomping Grounds Coffee	Number of Cups of Stomping Grounds Coffee You Would Buy Each Week
\$10	
\$5	
\$4	
\$3	
\$2	
\$1	
\$0 (Amy is giving away coupons for free coffee.)	

ACTIVITY 14.2

STOMPING GROUNDS: SELLERS

You are desperate for cash. You have begged your friends for money. “No deal,” they said. You asked your parents for an increase in your allowance. The answer was a big “No.” You called old Uncle Bart on your cell phone. Another “No”—but worse. He didn’t even remember your name.

You decide to take matters into your own hands and search for a job. You notice that Stomping Grounds, Inc., a trendy new coffee shop, is looking for employees. It looks like a nice place to work.

Amy, the owner of Stomping Grounds, has a plan for you to consider. If you worked for Stomping Grounds, you could choose the number of hours you would work each week, and you could arrange the hours to fit your schedule. How many hours per week do you think you would be willing to work at Stomping Grounds to earn money? The answer might depend on the pay you would earn. Examine the table below. Then estimate the maximum number of hours you would be willing to work at each wage level.

For example, suppose Amy offered you a job as a volunteer, at no wage. Write in the number of hours you would be willing to work each week at the wage of \$0 in the table below. Then consider another wage, \$10 per hour. How many hours would you work at that wage? Write in that number, too. Complete all the blanks in the same manner. If you would not work at a particular wage, write a zero in the blank next to the wage.

Wages You Would Earn for One Hour of Work	Hours per Week You Would Work at This Wage
\$30	
\$25	
\$20	
\$15	
\$10	
\$0 (You are a volunteer.)	

ACTIVITY 14.3

MIGHTY WINGS GAME

Overview

In the following game, you will buy or sell stocks in an imaginary business called Mighty Wings, Inc. Half of you will be buyers and half will be sellers. In addition, a Card Keeper will give you a card with important instructions about each exchange. A Recorder will keep track of the exchanges you make.

You will play the game in three five-minute rounds. Your goal is to make as much money as you can by the end of the game. If you are a seller, however, you must deal with the law of demand when you try to get a high price for your shares. If you are a buyer, you must deal with the law of supply when you try to pay a low price for the shares you want.

Directions

1. Buyers will start the game with one Buy Card and one score sheet. The Buy Card will say “You are authorized to BUY one share of Mighty Wings, paying as little as possible. If you spend more than _____, you will lose money.” The exact price is written on the Buy Card.
 - Record the price shown on your Buy Card on your score sheet.
 - When the round starts, try to buy at the lowest price the seller will agree to. If you pay exactly the price written on your card, you will break even for that transaction. If you pay less than the price on your card, the difference is a gain. If you pay more than the price on your card, the difference is a loss.
 - You may buy shares of stock at any price, as long as you can find a willing seller. But that price must always be in multiples of 5. That is, the price for one share may be \$5, \$10, \$15, \$20, and so on.
 - As soon as you have bought a stock, record the transaction on your score sheet.
 - Report the price you have negotiated to the Recorder; the Recorder will keep a tally on the Classroom Tally Sheet.
 - Turn in your card. Receive a new card and begin the negotiation process anew.
2. Sellers start the game with one Sell Card and one score sheet. The Sell Card will say “You are authorized to SELL one share of Mighty Wings, for as much as possible. If you sell for less than _____, you will lose money.” The exact price is written on the Sell Card.
 - Record the price shown your sell order on your score sheet.
 - When the round starts, try to sell at the highest price you can get. If you get exactly the price written on your card, you will break even for that transaction. If you get more than the price on your card, the difference is a gain. If you get less than the price on your card, the difference is a loss.
 - You may sell shares of stock at any price, as long as you can find a willing buyer. But that price must always be in multiples of 5. That is, the price for one share may be \$5, \$10, \$15, \$20, and so on.

- As soon as you have sold a stock, record the transaction on your score sheet.
 - Turn in your card. Receive a new card and begin the negotiation process anew.
3. When the teacher says, “The market is open,” buyers and sellers should meet in the designated area and try to agree on a price for one share of stock.
 4. The goal of buyers and sellers is to earn as much money as they can. Buyers will do this by purchasing stock for a price lower than the prices shown on their cards. Sellers make money by selling for higher prices than the prices shown on their cards.
 5. Every time a price is agreed on and a sale is made, the buyer must report the price to the Recorder, who will enter it on the Classroom Tally Sheet.
 6. As soon as buyers and sellers receive new cards, they should return to the market and try to make another deal.
 7. All students are free to make as many transactions in a round as time permits. Once the teacher says, “The market is closed,” no further transactions will count.

ACTIVITY 14.4
SCORE SHEET FOR THE MIGHTY WINGS GAME

Name _____ Date _____

Circle one: I Am a Buyer I Am a Seller

Number of Exchanges	Price on Your Card	Transaction Price	Gain	Loss
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
Total				

Net Gain or Loss (Circle one) _____

ACTIVITY 14.5

SELL CARDS

Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$10 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$10 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$10 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$10 you will lose money.
Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$10 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$10 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$15 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$15 you will lose money.
Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$15 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$15 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$15 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$15 you will lose money.
Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$15 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$15 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$20 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$20 you will lose money.
Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$20 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$20 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$20 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$20 you will lose money.
Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$20 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$20 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$25 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$25 you will lose money.
Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$25 you will lose money.	Sell one share of Mighty Wings, Inc. for as much as you can get. But if you accept less than \$25 you will lose money.		

ACTIVITY 14.6

BUY CARDS

Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$5 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$5 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$5 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$5 you will lose money.
Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$10 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$10 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$10 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$10 you will lose money.
Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$10 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$10 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$10 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$10 you will lose money.
Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$15 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$15 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$15 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$15 you will lose money.
Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$15 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$15 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$15 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$15 you will lose money.
Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$20 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$20 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$20 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$20 you will lose money.
Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$20 you will lose money.	Buy one share of Mighty Wings, Inc. for as little as you can. But if you pay more than \$20 you will lose money.		

ACTIVITY 14.7**UNDERSTANDING SUPPLY, DEMAND, AND EQUILIBRIUM PRICE****Part 1: Equilibrium Price**

Why did exchange prices of Mighty Wings stock concentrate around \$15 per share? The answer is that this price is the only one at which there was neither a shortage nor surplus in the market. Here's why.

A market exists whenever buyers and sellers exchange with one another. But the amount sellers want to sell can be very different from the amount buyers want to buy. In the game you played, only a price of \$15 per share balanced these two amounts.

Figure 1 below shows what was happening in the market for Mighty Wings stocks. The table shows what all the buyers' cards were telling them to do. And it shows what all the sellers' cards were telling them to do.

Figure 1

Price Per Share	Number of Shares Sellers Want to Sell	Number of Shares Buyers Want to Buy
\$25	26	0
\$20	22	6
\$15	14	14
\$10	6	22
\$5	4	26

Note that the equilibrium price is the only one at which buyers want to buy the same number of shares that sellers want to sell. Here, a price of \$15 is the equilibrium price because it balances these two quantities at 14 shares.

Part 2: How to Balance a Market

The numbers in Figure 1 illustrate the laws of supply and demand. Sellers offer more stocks for sale at higher prices than at lower prices. In contrast, buyers want to buy fewer stocks at higher prices than at lower prices.

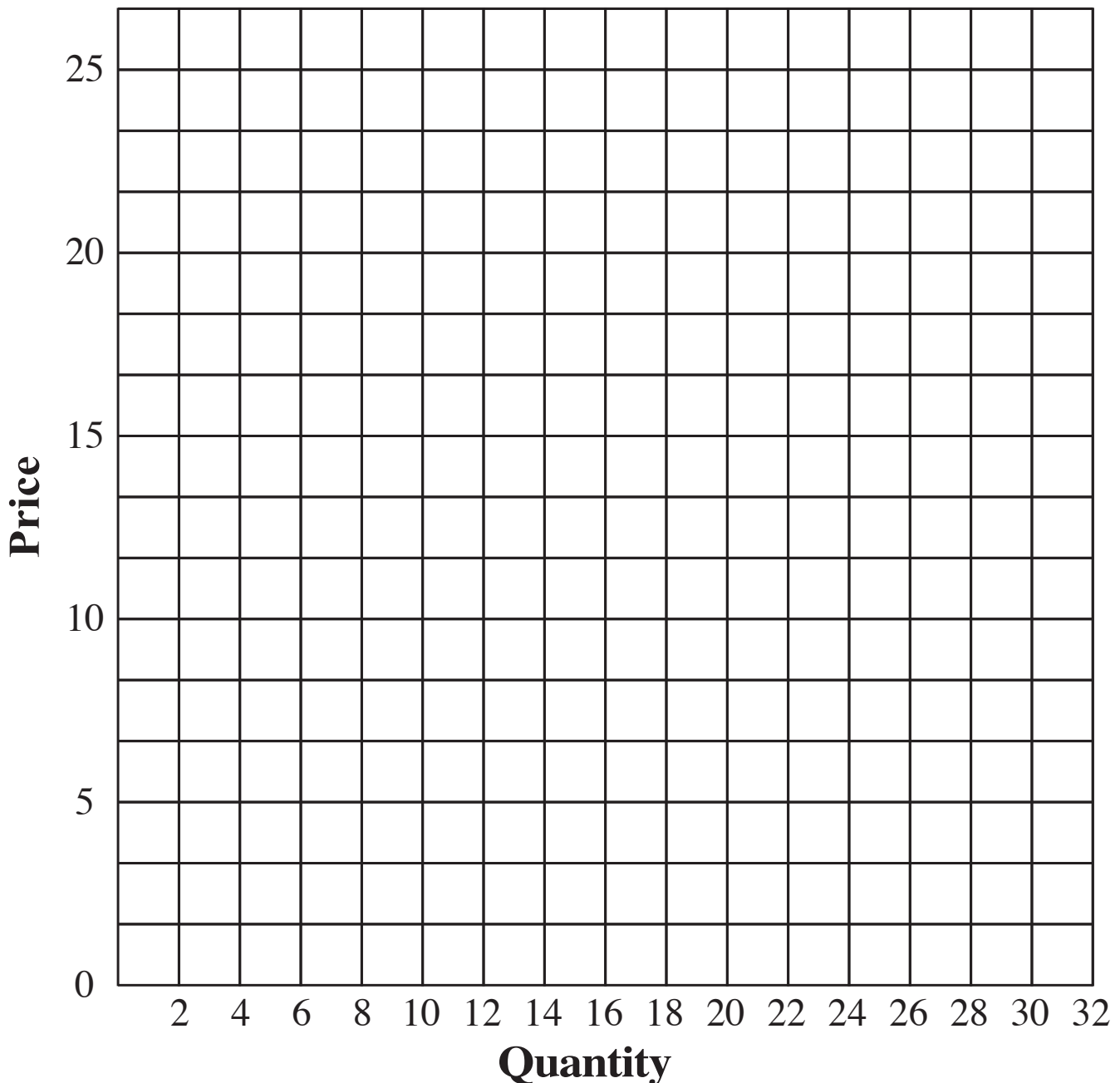
For example, look at Figure 1 to see what happens when the price is \$25. At this price, sellers want to sell 26 shares. But buyers do not want to buy any shares at that price. So the market is unbalanced. A surplus of 26 shares exists. This means sellers want to sell 26 more shares than buyers want to buy at that price. Because of the surplus, sellers reduce their prices. Only by decreasing their prices to \$15 per share can they sell all the shares they want to sell.

On the other hand, the price can also be too low. Look what happens when the price is \$10 per share. Here, too, the market is unbalanced. A shortage of 16 shares exists. This means that buyers want to buy 16 more shares than sellers want to sell at that price. Because of the shortage, buyers increase their prices. Only by increasing their prices to \$15 per share can they buy all the shares they want.

A price of \$15 per share turns out to be a special price. It is special because of what it does: It balances the number of shares that buyers and sellers want to trade. Because of its special role in balancing the shares demanded and supplied, this price is called the equilibrium price. It is the only price at which the shares demanded and supplied are in equilibrium.

We can use a graph to show what happens in a market. This may not seem important now, but it is useful when the supply and demand curves change. Draw a graph in Figure 2 to illustrate the information contained in Figure 1. Label the demand curve with “D” and the supply curve with “S.”

Figure 2
Supply and Demand Curves for Mighty Wings, Inc. Stock



Questions for Discussion

- A. What is the law of demand?

- B. What is the law of supply?

- C. What is the equilibrium price of Mighty Wings in Figure 2?

- D. What would happen if the price of Mighty Wings rose above \$15?

- E. What would happen if the price of Mighty Wings fell below \$15?

Part 3: The Ups and Downs of Stock Prices

The game you played shows how buyers and sellers adjust their prices to reach a balance, or equilibrium. But these balances seldom stay the same. Demand and supply are continually changing, and buyers might want to buy more at each possible price. If so, they bid the price up to a new equilibrium level. Or sellers might want to sell more at each possible price. If so, they push the price down to a new equilibrium level.

So there is no mystery behind the ups and downs of prices for stocks—or for other goods and services. Prices change because buyers and sellers become more or less willing to buy or sell something. Then they work out new equilibrium prices to balance the market—just as your class did for Mighty Wings, Inc. stocks.

Part 4: A Change in Demand

Let’s see how an equilibrium price can change when the demand for Mighty Wings, Inc. stock is greater at every price. Suppose that Mighty Wings, Inc. makes high-quality roller skates. This year, however, roller skates are the latest fad. Profits for Mighty Wings, Inc. have increased greatly, and people want to buy six more shares of its stock at every price. Fill in the new demand schedule in Figure 3. Next, label the original demand curve in Figure 2 as D1. Then graph this year’s change by drawing a demand curve on Figure 2. Label the new demand curve D2.

Figure 3

Supply and Demand Schedules for Mighty Wings, Inc. Stock

Price per Share	Number of Shares Sellers Want to Sell	Number of Shares Buyers Want to Buy
\$25		6
\$20		
\$15		
\$10	2	
\$5	0	

Questions for Discussion

- A. What happened to demand?

- B. What happened to the equilibrium price?

Part 5: Change in Supply

Sellers now expect the price of a share of Mighty Wings, Inc. stock to rise in the future. Sellers offer four fewer shares at each price. Write the number of shares sellers are now willing and able to sell in Figure 3. First, label the original supply curve S1; then draw a new supply curve on Figure 2. Label the new supply curve S2.

Questions for Discussion

A. What happened to supply?

B. What happened to the equilibrium price (compare the prices on D2 and S2)?

The completed Figures 2 and 3 show an increase in demand and a decrease in supply. Demand increased and supply decreased because the stock is now more attractive. Current owners want to hold on to more shares. And other investors are more eager to buy shares for themselves.