The following table shows cost and sales figures for a company that sells board games. Use a computer spreadsheet to fill in the missing information.

	Unit Cost	Number Produced	Fixed Cost	Total Cost	Unit Price	Revenue	Profit (Loss)
1.	$8.93	15	$310.00		$25.00		
2.	7.50	125	310.00		25.00		

Use the following table for Exercises 3–5.

Comparison Table for Term and Whole Life Annual Premiums for a Policy with a Face Value of $100,000			
Age	5-year Renewable Term	Whole Life	First-year Difference
20	$205	$ 775	$570
25	207	918	711
30	218	1112	894

3. What is the annual premium for a $100,000 whole life policy for a 20-year-old person?

4. What is the annual premium for a $200,000 term policy for a 30-year-old person?

5. Determine the difference that a 25-year-old person will pay in annual premiums the first year if he or she takes a term policy with a face value of $250,000 instead of a whole life policy with the same face value.

Enter the following transactions in a check register form. Make up your own form with the following headings: Check Number, Date, Checks/Deposits, Amount, and Balance. Under "Checks/Deposits" have two lines for each entry, the top one labeled "To:" and the bottom one labeled "For:." Find the new balance after each transaction. The starting balance is $450.

6. Check 201, September 27, to Aaron Jones, $158.50 for car repair

7. Deposit on September 29 of $130

8. Check 202, September 29, to Superior Supermarket, $87.63 for groceries

9. The probability that a person will be alive in 1 year is 0.98329. What is the probability that the person will die within 1 year?

10. Last month, the Antonelli family spent $241 on the car payment, $452 on credit card payments, $841 on the mortgage, $86 on utilities, $475 on food, and $1500 on everything else. To the nearest tenth of a percent, what percent of their take-home pay did the family spend on credit payments?

1. How can you make money from stocks?

2. How is buying bonds the same as lending money to a municipality or a corporation?

3. Why are mutual funds suitable for small investors?

4. What do you think is the most important factor in deciding whether or not to buy stocks?

5. What method is used by brokers to buy and sell stocks on a security exchange?

6. How does the Securities and Exchange Commission help to protect investors?

7. Why is it important to adopt a long-term point of view when buying stocks whether directly in the stock market or indirectly through a mutual fund?

Use the prices per share shown below to find the number of whole shares of stock that you can afford to purchase if you have $20,000 to invest in each of the following companies. Then find the total cost of the shares. Ignore brokerage commissions.

	Company	Price per Share	Number of Whole Shares	Total Cost
8.	NunnInc	42		
9.	OctOfAm	$7\frac{5}{8}$ .625		
10.	OscarsPies	$18\frac{3}{4}$ .75		
11.	OwlInd	150		

Find the capital gain or loss from buying 2500 shares at the given purchase price and selling them at the current market value. Ignore the effect of commissions.

	Company	Buy	Total Value	Sell	Total Value	Gain/Loss
12.	Disnel	$63\frac{1}{2}$		$68\frac{1}{2}$		
13.	AP & P	$18\frac{1}{2}$		$30\frac{1}{4}$		
14.	Banter	$24\frac{3}{8}$		$19\frac{5}{8}$		
15.	Zola	$43\frac{1}{2}$		89		

The 5-year performance of the Vantage Long-Term Growth Fund is shown below.

Date	Number of Years After Start	Price of Vantage Long-Term Growth Fund
July 1, 1988	0	$10.00
Jan. 1, 1989	0.5	10.70
July 1, 1989	1.0	12.90
Jan. 1, 1990	1.5	11.80
July 1, 1990	2.0	13.10
Jan. 1, 1991	2.5	12.50
July 1, 1991	3.0	14.30
Jan. 1, 1992	3.5	16.10
July 1, 1992	4.0	17.60
Jan. 1, 1993	4.5	18.90
July 1, 1993	5.0	20.10

16. Make a scatter plot for the above data beginning with July 1, 1988.

17. Make a broken line graph for the data.

18. Use a graphing calculator to find the linear regression equation that is the line of best fit for the data.

19. Use the equation that you found in Exercise 18 to predict a possible value for the Vantage Long-Term Growth Fund in July 1995.

Use a graphing calculator to make an exponential regression model for the cost of food from 1960 to 1992 as shown in the table on page 389. Then answer Exercises 20–22.

20. What is the equation for the model?

21. How accurately does the model agree with actual cost of food in 1960?

22. What value does the model suggest for the average annual rate of increase in the cost of food between 1960 and 1992?

For the companies listed below, find the number of whole shares that you can buy with $100,000. Ignore commissions.

1. Z Mart at $65\frac{1}{4}$ per share
2. Disnel at $38\frac{3}{4}$ per share
3. Zaxta at $87\frac{1}{2}$ per share
4. Algin at $25\frac{7}{8}$ per share

5.–8. Find the total value of the shares of stock in Exercises 1–4.

For the following companies, find the commission cost and the total purchase cost (price plus commission) for the given information.

9. 306 Cts&Dgs; $20/share; 2%
10. 215 Elmo; $33.50/share; 1%
11. 400 SuprCo; $100.375/share; 1.5%
12. 6000 Langly; $7/share; 0.5%

The value of the Vantage Conservative Growth Fund grew annually for 5 years as follows, beginning on January 1, 1988: $15.00 (starting value), $15.70, $16.80, $17.80, $19.00, $20.60.

13. Make a scatter plot for the above data beginning with January 1, 1988.

14. Make a broken line graph for the data.

15. Use a graphing calculator to find the linear-regression equation that is the line of best fit for the data.

16. Use the equation that you found in Exercise 15 to predict a possible value for the Vantage Conservative Growth Fund in January 1996.

Use the Consumer Price Index (1960–1992) on page 389 in Lesson 8–4 to find the approximate cost of each of the following items in 1989. Choose from the categories Food, Shelter, and Apparel. For each item the 1984 price is given.

17. Woman's jacket; $50.75
18. House; $77,000
19. Rent; $435
20. Pizza slice; $0.70

An investor believes that if there is inflation in the next 5 years, then her $10,000 investment will grow to about $18,000 but that if there is a deflation, then the investment may drop to $7500. She thinks that the next 5 years will be either inflationary or deflationary with a 30% probability that the economy will be deflationary.

21. What is the probability that the economy will be inflationary?

22. What is the expected value of the investment in 5 years?

CUMULATIVE REVIEW

1. If Phyllis works more than 25 hours in one week, she receives $1\frac{1}{2}$ times her regular wage rate of $4.80 for each of the extra hours. One week she worked 32 hours and received $68.75 in tips. How much money did Phyllis earn that week?

2. Angela earns a weekly salary of $150 at the real estate agency where she works and gets a 4% commission for each house that she sells. In a 4-week period her sales were $100,000. What were her total earnings?

3. Suppose you wrote 30 checks in June. Your bank charges $0.040 per check for the first 25 checks and $0.10 for each check over 25. How much were your June bank charges?

Andy can save $35 a week. He wants to buy a 25-inch remote stereo color TV that sells regularly for $419.99 but will be on sale for 10 weeks at $369.99.

4. Find how much he can save between now and the sale.

5. How long will he have to save in order to be able to afford the TV? Will he be able to buy the set on sale? Explain your answer.

Use a calculator to find the amount of interest and the new balance that will accumulate over 2 years on the following principal amounts at the given interest rate compounded as shown.

	Principal	Interest Rate	How Often Compounded	Interest Earned	New Balance
6.	$5000	8%	Annually	1st period: _____	
				2nd period: _____	
7.	$9000	9.5%	Semiannually	1st period: _____	
				2nd period: _____	

The following table shows cost and sales amounts for a company that sells sports equipment. Use a computer spreadsheet to fill in the missing information.

	Unit Cost	Number Produced	Fixed Cost	Total Cost	Unit Price	Revenue	Profit (Loss)
8.	$6.50	20	$550.00		$86.00		
9.	6.50	295	550.00		86.00		

10. Use the monthly payment formula $M = \dfrac{Pr(1 + r)^n}{(1 + r)^n - 1}$ to determine how much money will be saved by purchasing a $950 computer with monthly payments at an interest rate of 12% rather than 18%. The loan is to be repaid in 2 years.

11. Determine the effective interest rate on a credit card with an APR of 14%.

1. Find several companies of medium or large size that make high-quality products with which you are familiar.

2. In the financial section of your local public library, find your chosen companies' names in a standard reference manual such as *Standard & Poor's*. Make a note of the the telephone numbers of the four companies that appeal to you the most.

3. Phone each company. Ask the person responsible for shareholder relations to send you a copy of the most recent annual report and any other available information about the company. The vast majority of companies will respond favorably to your request.

4. The material from the companies may tell you whether any of the companies has a local branch. Find out what you can about that branch, such as the role it plays in its community and its employees' attitudes.

5. Track your companies' stock prices for several weeks in the newspaper.

6. Share with the rest of the class all of the information that you have about your companies.

Extension

On the basis of what you have learned, select the company that you think would be the best investment for at least the next 5 years. Share your reasons for this choice with the rest of the class.