

# Glossary

## A

**account statement** A bank statement that shows all deposits, withdrawals, and interest credited to an account.

**accumulated depreciation** The total depreciation of an item to date.

**amount financed** The portion of the cash price that is owed on an item after making the down payment.

**amount of change** When comparing income statements, the difference between the base figure on the earlier statement and the corresponding figure on the current statement.

**annual expenses** Expenses which occur once a year, such as insurance premiums and real estate taxes.

**annual interest rate** The percent of the principal in a bank account earned as interest based on one year.

**annual percentage rate (APR)** An index showing the cost of borrowing money on a yearly basis, expressed as a percent.

**annual yield** The rate at which money earns simple interest in one year.

**annuity** An equal amount of money deposited into an account at equal periods of time.

**annuity due** An account in which regular deposits are made at the beginning of each interest period and start earning interest immediately.

**apportion** To distribute expenses among different departments.

**assessed value** The dollar value assigned to property by a tax assessor for tax purposes, which is found by multiplying the market value times the rate of assessment.

**assets** The total of your cash, the items that you have purchased, and any money that your customers owe you.

**automated teller machine (ATM)** A bank machine that allows you to deposit or withdraw money electronically using a card.

**average-cost method** Calculating the value of an inventory based on the average cost of items in stock.

**average-daily-balance method** Computing the finance charge on a credit account based on the average of the account balance at the end of each day of the billing period.

## B

**balance** The amount of money you have in an account.

**balance sheet** A statement that shows your total assets, total liabilities, and owner's equity.

**base figure** When comparing income statements, the dollar amount on the earlier income statement.

**base price** The price of a vehicle's engine, chassis, and any other standard equipment for a particular model.

**beneficiary** A person who receives the money from life insurance if the insured dies.

**bonds** Certificates issued by a business that indicate the buyer has lent the business money; written pledges issued by governments and corporations to repay a specific amount of money with interest at a certain time in return for lending them the money.

**book value** The approximate value of an item after it has been owned and depreciated for a period of time.

**break-even analysis** Determining how many units of a product must be made and sold to cover the cost of producing it.

**break-even point** The point where income from sales on a product equals what it cost to produce the product.

**budget** A plan for using money in a way that best meets your wants and needs.

**budget sheet** A record of monthly expenditures.

## C

**capital** The amount of your owner's equity.

**cash discount** A discount a supplier grants if a bill is paid within a certain number of days.

**cash value** Monetary value that a life insurance policy builds up, like a savings account, that can be cashed in or borrowed.

**certificate of deposit** A kind of savings account that requires a specific deposit for a specified period of time, and which earns a higher rate of interest than a regular savings account.

**chain discounts** A series of trade discounts a supplier may offer to sell out a discontinued item or to encourage a customer to place a larger order.

**charge account** An existing line of credit, often at a particular business.

**check register** A record you keep of your checking account deposits, withdrawals, and transfers.

**closing costs** The costs of transferring ownership of property, such as credit checks and title searches, to the buyer by the seller.

**co-insurance** A percent of medical expenses a person with health insurance must pay beyond the deductible.

**collision insurance** Insurance that pays to repair a vehicle if it's involved in an accident.

**commercial loans** Loans made to businesses rather than individuals.

**commercial paper** A promissory note issued by various companies that pay interest. They are actually loans to a company.

**commission** An amount of money paid to an employee for selling a product or service.

**commission rate** A specified amount of money paid to an employee for each sale made or a percent of the total value of sales made.

**complement method** A way to find the net price of a discounted item by subtracting the discount rate from 100 percent.

**compound interest** Interest earned not only on the principal in a bank account, but also on the interest earned on the account, or interest on interest.

**comprehensive insurance** Insurance protection from losses due to fire, vandalism, theft, and other causes.

**consultants** Professional advisers hired by businesses to solve particular problems.

**consultant's fee** Payment to a consultant for professional services, it may be in the form of a flat fee, a percent of the cost of a project, or an hourly charge.

**consumer price index (CPI)** A measure of the average change in prices of a certain number of goods and services.

**co-payment** An amount a person with health insurance must pay for a service, such as a prescription or a doctor's visit, along with the insurance company.

**corporations** Businesses with many owners called stockholders.

**cost** The actual amount paid for a product, as opposed to its selling price, and which can include expenses such as freight charges and taxes.

**cost of goods sold** The value of a beginning inventory, plus the cost of any goods received, minus the value of the ending inventory.

**cost-of-living adjustment** A raise in salary to keep up with the rate of inflation.

**coupons** Discounts offered by businesses in the form of tickets that are redeemed at the time of purchase.

**credit card** A card that allows the cardholder to purchase goods and services on demand by presenting it.

**current ratio** The ratio of total assets to total liabilities.

## D

- daily compounding** Interest on an account that is computed each day and added to the account balance.
- dealer's cost** The price actually paid for a vehicle by a dealer, usually expressed as a percent. The dealer's cost is not negotiated.
- deductible** An amount of money someone with insurance must pay before the insurance company pays anything.
- deductible clause** An insurance clause that requires the insured to pay a certain amount before the insurance company pays.
- defective** What manufactured items that are broken, damaged, the wrong size, or otherwise faulty are classified as.
- demand charge** The cost of electricity based on the peak load, or greatest number of kilowatts used by a business at one time during the month.
- deposit** Money put into a bank account.
- depreciation** A decrease in the value of an item or vehicle because of its age or condition.
- destination charge** The cost of shipping a vehicle from the factory to the dealer.
- direct labor cost** The cost of the labor used to make a product, such as wages paid to employees.
- direct material cost** The cost of the goods or materials used to make a product.
- disability insurance** Insurance that pays benefits to individuals who must miss work because of an illness or injury.
- discount** The difference between the face value and the maturity value of a bond or Treasury bill.
- dividend** Money received for being a shareholder in a corporation.
- double time** An overtime pay rate of two times the regular hourly rate, often paid for working on Sundays and holidays.
- down payment** A portion of the cash price of an item that has to be paid before financing the rest on credit.

## E

- emergency fund** Extra monies set aside to be used for unpredictable expenses, such as medical bills and vehicle repairs.
- employee benefits** Services offered by businesses to employees beyond salary, or wages, such as paid vacations, health insurance, and sick leave.
- end-of-month dating** Terms of payment on an invoice from supplier which grants a cash discount if a bill is paid within a certain numbers of days after the end of the month when the invoice is issued.

**energy charge** The cost of electricity based on the total number of kilowatt-hours used by a business during the month.

**estimated life** The length of time, usually in years, an item is expected to last.

**exact interest** Interest on a loan calculated by basing the time of the loan on a 365-day year.

**expenditures** Items you spend money on.

**expense summary** A monthly report that compares the amounts you spend to the amounts you have budgeted.

## F

**face value** The amount of money printed on a bond or Treasury bill that you receive on its maturity date.

**factor** A company's present share of the market for a product or service.

**factor method** Projecting a company's sales by multiplying the company's present market share by the projected sales for the entire market for the coming year.

**federal income tax** Money withheld by an employer from an employee's paycheck to pay federal government taxes.

**final payment** Payment on a simple interest loan that consists of the remaining balance plus the current month's interest.

**finance charge** Interest that is charged to a credit account if the account holder does not pay off the balance in full.

**fire protection class** A number assigned to property based on how safe it is from fire, and whether a house is made of wood or brick, used to determine the cost of insuring it.

**first in, first out (FIFO)** A method of valuing inventory that assumes the first items received are the first items shipped out.

**fixed costs** Production or vehicle costs that remain the same no matter how much you produce or drive, such as building rent or vehicle registration.

**fixed expenses** Regular expenses that do not vary from month to month, such as rent and car payments.

**fuel adjustment charge** A charge added to an electricity bill to cover increases in the cost of fuel needed to produce electricity.

## G

**graduated commission** Pay in which the commission rate is different for different levels of sales.

**graduated income tax** An income tax in which the tax rate increases at different levels of income.

**gross domestic product (GDP)** The total value of the goods and services produced in a country in a given year.

**gross profit** The amount of money a supplier makes on a product when it sells it for more than it costs.

**group insurance** Insurance offered by many businesses to employees, paid in part by the business and in part by deductions from employees' paychecks.

**growth expenses** Expenses from expanding a business, such as construction fees and consultation fees.

## H

**health insurance** Protection against the costs of medical expenses.

**health maintenance organization (HMO)** A group program that provides health care at its own center with its own doctors for a fixed fee per month.

**homeowners insurance** Financial protection for homeowners against fire, theft of contents, personal liability, and other damages.

**horizontal analysis** The comparison of two or more income statements for different periods.

**hourly rate** A fixed amount of money paid for each hour of work.

## I

**income statement** A statement that shows in detail the income and operating expenses of a business, also called a profit-and-loss statement.

**inflation** A general increase in the cost of goods and services.

**installment loan** A loan repaid in equal payments over a specified period of time.

**interest** The amount of money paid for the use of a lender's money.

**inventory** The number of each item that a business has in stock.

**inventory card** A record of each item a business has in stock.

**invoice** A bill listing the quantities and costs of items purchased.

## K

**kilowatt** A unit of electrical power equal to 1,000 watts, used by power companies to measure energy usage.



## L

**labor charge** The cost of paying people to do a job.

**last in, first out (LIFO)** A method of valuing inventory that assumes the last items received are the first items shipped out.

**lease** An agreement for the use of property, such as a building or a vehicle, usually on an annual basis.

**liabilities** The total amount of money that you owe to creditors.

**liability insurance** Financial protection against accidents that cause bodily injury and property damage.

**life insurance** Financial protection for a family in case a family member dies.

**limited payment policy** Life insurance that is paid up after a specified number of years, or until the insured reaches a certain age, but offers lifetime protection.

**list price** The price at which a business generally sells an item, also call the catalog price.

**living expenses** Routine expenses, such as food, utilities, and clothing, that vary from month to month.

**loss** The amount of money lost on an investment, such as stocks.

**loss-of-use coverage** Insurance coverage for homeowners that pays for the costs of living away from home while the home is being repaired.

## M

**manufactures** Makes, or produces, a product.

**markdown** The difference between the regular selling price of an item and its sale price, also called the amount of the discount.

**markdown rate** The discount on an item expressed as a percent of its regular selling price, such as 20 percent off.

**market** The total number of people who might purchase a type of product.

**market share** The total number of people who might purchase a specific product.

**market value** The price at which a house can be bought or sold.

**markup** The difference between the cost of a product and the selling price when the selling price is higher.

**markup rate** The markup on an item expressed as a percent of its selling price.

**maturity value** The total amount that must be repaid on a loan, including the principal borrowed and the interest owed.

**medical coverage** Insurance for homeowners that pays medical expenses if someone is injured in their home.

**Medicare** A federal government program to provide medical insurance, financed by taxes.

**merge** To combine one business with another business to form a new business.

**merit increase** A raise in salary to reward an employee for the quality of his or her work.

**modified accelerated cost recovery system (MACRS)** A method of computing depreciation that allows businesses to depreciate assets fully over a set period of time.

**monthly service charge** Base amount charged by a utility, such as a phone company, to its customers for use of its services.

**mortgage loan** A real estate loan that gives the lender the right to seize and sell the property if the borrower fails to make the payments on the loan.

## N

**net income** Any money left over after expenses have been deducted from gross profits, also called net profit.

**net pay** The amount of money you actually receive in your paycheck after deductions, also called take-home pay.

**net price** The price actually paid for a discounted item.

**net-price rate** The percent of the price paid for an item, found by multiplying the complements of the chain discounts.

**net profit** Any money left after expenses have been deducted from gross profits, also called net income.

**net-profit rate** The net profit on an item expressed as a percentage of the selling price.

**net worth** The amount by which your assets exceed your liabilities.

## O

**online banking** Doing bank transactions, such as loan payments and funds transfers, electronically over the Internet.

**operating expenses** The costs of running a business, such as salaries, rent, utilities, and taxes, also called overhead.

**opinion research firm** A business that specializes in product testing and opinion surveys.

**opinion survey** A series of questions about a new product submitted to a group of volunteers to find out how well the product will sell.

**options** Extra equipment on a vehicle not included in the base price, such as a sunroof, air conditioning, and tinted glass.





**ordinary annuity** An account in which equal deposits are made at the end of each interest period and start earning interest at the beginning of the next interest period.

**ordinary dating** Terms of payment on an invoice from a supplier which grants a cash discount if a bill is paid within a certain number of days.

**ordinary interest** Interest on a loan calculated by basing the time of the loan on a 360-day year.

**overtime pay** Extra pay for hours worked beyond regular hours.

**owner's equity** The difference between your assets and your liabilities.

## P

**packaging** Placing a product in a container for shipment, or the actual containers themselves.

**payroll register** A record of the gross income, deductions, and net income of a company's employees.

**peak load** The greatest number of kilowatts of electricity a business uses at one time during the month.

**per capita GDP** The gross domestic product of a country distributed over the population, or the GDP per person.

**personal exemptions** The number of people an employee supports, on which taxes are based, also called withholding allowances.

**personal identification number (PIN)** A personal number on a bankcard that gives you access to your bank account electronically.

**personal liability** Insurance coverage for homeowners if someone is injured in their home.

**piecework** A specified amount of money paid to an employee for each item of work completed.

**preferred provider organization (PPO)** A group of selected health care providers who offer comprehensive services at preset reimbursement levels.

**premium** The amount paid to an insurance company for insurance.

**prime cost** The total of the direct material cost and the direct labor cost used to make a product, often expressed on a per-unit basis.

**prime rate** The lowest rate of interest available for commercial loans at a given time.

**principal** The amount borrowed on a loan or put into an account, on which interest is based.

**product test** A test to see how well a new product is likely to sell by asking a group of people to try the product.

**profit** Money made on a product or an investment over and above the amount spent on it.

**profit-and-loss statement** A statement that shows in detail the income and operating expenses of a business, also called an income statement.

**promissory note** A written promise to pay a certain sum of money on a certain date in the future.

## Q

**quality control** Inspecting mass-produced items for defects.

**quality control chart** A chart that shows the percent of defective products that is allowable in manufacturing.

**quick ratio** The ratio of total assets minus inventory to total liabilities, sometimes called the acid-test ratio.

## R

**rate of assessment** Percent of the market value of property that is taxed.

**real estate taxes** Taxes collected by the city or county from homeowners to pay for roads, parks, schools, and other public services.

**real GDP** The gross domestic product adjusted to include the effects of inflation.

**rebates** Discounts offered by businesses in the form of money given back to the customer, usually through the mail.

**reconcile** To compare your check register with the bank statement of your checking account to make sure they agree.

**recordkeeping** Keeping track of monthly expenses by recording them in a budget sheet.

**recruiting** The act of soliciting qualified people to work for a company.

**release time** Time an employee spends away from a job for which a business will still pay a regular salary, such as for a training program.

**rent** Payment for the use of property, such as a building or vehicle, often on a daily, weekly, or monthly basis.

**repayment schedule** A schedule showing the distribution of interest and principal payments on a loan over the life of the loan.

**replacement value** The amount required to reconstruct a home if it's destroyed, used to determine the amount of insurance a home should have.

## S

**salary** A fixed amount of money earned on a regular basis, received weekly, bi-weekly, semimonthly, or monthly.

**salary scale** A table of wages or salaries used to compare various jobs in a company.

**sale price** The regular selling price of an item minus the discount or markdown on the price.

**sales potential** An estimate of the sales volume of a product during a specified period of time.

**sales projection** An estimate of the dollar volume or unit sales of a product that might occur during a future time period.

**sales receipt** Proof of purchase of a good or service from a store.

**sales tax** A tax charged by most states on the selling price of a good or service, usually expressed as a percent.

**salvage value** The estimated trade-in, resale, or scrap value of an item at the end of its expected life.

**sample** A selected group of people (who are representative of a much larger group) that try out a new product to find out how well the product will sell.

**savings account** A special bank account for storing money for future use.

**selling price** What a product actually sells for in the store, also called retail price.

**simple interest installment loan** A loan repaid with equal monthly payments.

**simple interest** Interest paid only on the principal in a bank account.

**single equivalent discount** One discount that is equal to a chain discount.

**single-payment loan** A loan that has to be repaid with one payment after a specified period of time.

**Social Security** A federal government program to pay for retirement and disability benefits, financed by taxes.

**sticker price** The total price of a vehicle, including the base price, options, and destination charge.

**stock certificate** Proof of ownership in a corporation.

**stocks** Shares of ownership in a corporation.

**straight commission** Pay that consists only of money earned on sales.

**straight-line method** A method of determining the annual depreciation of an item which assumes that the depreciation is the same from year to year.

**straight-time pay** The total amount of money earned for a pay period at the regular hourly rate.

## T

**tax rate** The percent of income, sales, or property value collected in taxes. The tax rate on property is sometimes expressed in mills per dollar.

**taxable income** The amount of gross income that remains after normal business expenses are deducted, upon which taxes are based.

**term** The amount of time for which a loan is granted before it has to be repaid.

**term life insurance** Life insurance for a specified term, such as five years, or to a specified age, that ends unless the policy is renewed. The cost of the insurance is based on the age of the insured.

**time and a half** An overtime pay rate of  $1\frac{1}{2}$  times the regular hourly rate.

**time study** Determining the average time a task should take to do.

**total purchase price** The selling price of an item plus the sales tax.

**trade discount** A discount off the list price or catalog price of an item.

**trade-discount rate** The amount of the discount of an item expressed as a percent of the list price or catalog price.

**travel expenses** Expenses required to travel for a business, for which the business will usually pay.

**Treasury bill** A bill that can be purchased from the federal government in various amounts and that pays interest. It is actually a loan to the government. Also known as a “T-bill.”

## U

**underwriting commission** An amount of money paid to an investment banker for helping a business distribute stocks or bonds.

**unemployment insurance** A federal and state program that provides financial aid to qualified persons who, through no fault of their own, become unemployed.

**unit pricing** The cost of an item per unit of measure or count, such as dollars per pound or cents per dozen.

**universal life insurance** A combination of a life insurance policy and a savings plan. It covers the insured for a lifetime, and any amount the insured pays over the minimum goes into an investment account that earns interest.

**unpaid-balance method** Computing the finance charge on a credit account based on the portion of the previous balance that has not been paid.

**used-vehicle guides** Guides published monthly that give the average prices for vehicles that were purchased from dealers during the previous month.

**utilities** Public services such as electricity, water, and gas.

**utility costs** The costs of public services such as electricity, water, and gas.

## V

**variable costs** The costs of producing a product that vary directly with the number of units produced, such as raw materials and packaging. Also, vehicle costs that increase the more you drive, such as gasoline and tires.

## W

**warehouse** A storage space for a business to keep materials or products until it's ready to use them, sell them, or ship them.

**weekly time card** A record of the time you report for work and the time you depart each day of the week.

**whole life insurance** Insurance that offers financial protection throughout one's lifetime and costs a specific amount, also known as permanent insurance.

**withdrawal** Money taken out of a bank account.

**withholding allowances** The number of people an employee supports, on which taxes are based, also called personal exemptions.

**workers compensation insurance** Insurance that covers employees' medical expenses and lost wages if they're hurt on the job.

## Y

**yield** Rate of return on a stock, a bond or Treasury Bill, or savings account earned by an investor after a certain period of time.

# Appendix

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**SINGLE Persons—WEEKLY Payroll Period**

(For Wages Paid)

If the wages are—		And the number of withholding allowances claimed is—										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10
The amount of income tax to be withheld is—												
\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
55	60	1	0	0	0	0	0	0	0	0	0	0
60	65	1	0	0	0	0	0	0	0	0	0	0
65	70	2	0	0	0	0	0	0	0	0	0	0
70	75	2	0	0	0	0	0	0	0	0	0	0
75	80	3	0	0	0	0	0	0	0	0	0	0
80	85	3	0	0	0	0	0	0	0	0	0	0
85	90	4	0	0	0	0	0	0	0	0	0	0
90	95	4	0	0	0	0	0	0	0	0	0	0
95	100	5	0	0	0	0	0	0	0	0	0	0
100	105	5	0	0	0	0	0	0	0	0	0	0
105	110	6	0	0	0	0	0	0	0	0	0	0
110	115	6	0	0	0	0	0	0	0	0	0	0
115	120	7	1	0	0	0	0	0	0	0	0	0
120	125	7	1	0	0	0	0	0	0	0	0	0
125	130	8	2	0	0	0	0	0	0	0	0	0
130	135	8	2	0	0	0	0	0	0	0	0	0
135	140	9	3	0	0	0	0	0	0	0	0	0
140	145	9	3	0	0	0	0	0	0	0	0	0
145	150	10	4	0	0	0	0	0	0	0	0	0
150	155	10	4	0	0	0	0	0	0	0	0	0
155	160	11	5	0	0	0	0	0	0	0	0	0
160	165	11	5	0	0	0	0	0	0	0	0	0
165	170	12	6	0	0	0	0	0	0	0	0	0
170	175	12	6	0	0	0	0	0	0	0	0	0
175	180	13	7	0	0	0	0	0	0	0	0	0
180	185	13	7	1	0	0	0	0	0	0	0	0
185	190	14	8	1	0	0	0	0	0	0	0	0
190	195	14	8	2	0	0	0	0	0	0	0	0
195	200	15	9	2	0	0	0	0	0	0	0	0
200	210	16	9	3	0	0	0	0	0	0	0	0
210	220	18	10	4	0	0	0	0	0	0	0	0
220	230	19	11	5	0	0	0	0	0	0	0	0
230	240	21	12	6	0	0	0	0	0	0	0	0
240	250	22	13	7	1	0	0	0	0	0	0	0
250	260	24	15	8	2	0	0	0	0	0	0	0
260	270	25	16	9	3	0	0	0	0	0	0	0
270	280	27	18	10	4	0	0	0	0	0	0	0
280	290	28	19	11	5	0	0	0	0	0	0	0
290	300	30	21	12	6	0	0	0	0	0	0	0
300	310	31	22	13	7	1	0	0	0	0	0	0
310	320	33	24	14	8	2	0	0	0	0	0	0
320	330	34	25	16	9	3	0	0	0	0	0	0
330	340	36	27	17	10	4	0	0	0	0	0	0
340	350	37	28	19	11	5	0	0	0	0	0	0
350	360	39	30	20	12	6	0	0	0	0	0	0
360	370	40	31	22	13	7	1	0	0	0	0	0
370	380	42	33	23	14	8	2	0	0	0	0	0
380	390	43	34	25	16	9	3	0	0	0	0	0
390	400	45	36	26	17	10	4	0	0	0	0	0
400	410	46	37	28	19	11	5	0	0	0	0	0
410	420	48	39	29	20	12	6	0	0	0	0	0
420	430	49	40	31	22	13	7	0	0	0	0	0
430	440	51	42	32	23	14	8	1	0	0	0	0
440	450	52	43	34	25	15	9	2	0	0	0	0
450	460	54	45	35	26	17	10	3	0	0	0	0
460	470	55	46	37	28	18	11	4	0	0	0	0
470	480	57	48	38	29	20	12	5	0	0	0	0
480	490	58	49	40	31	21	13	6	0	0	0	0
490	500	60	51	41	32	23	14	7	1	0	0	0
500	510	61	52	43	34	24	15	8	2	0	0	0
510	520	63	54	44	35	26	17	9	3	0	0	0
520	530	64	55	46	37	27	18	10	4	0	0	0
530	540	66	57	47	38	29	20	11	5	0	0	0
540	550	67	58	49	40	30	21	12	6	0	0	0
550	560	69	60	50	41	32	23	13	7	1	0	0
560	570	70	61	52	43	33	24	15	8	2	0	0
570	580	72	63	53	44	35	26	16	9	3	0	0
580	590	73	64	55	46	36	27	18	10	4	0	0
590	600	75	66	56	47	38	29	19	11	5	0	0



**SINGLE Persons—WEEKLY Payroll Period**

(For Wages Paid)

If the wages are—		And the number of withholding allowances claimed is—										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10
The amount of income tax to be withheld is—												
\$600	\$610	\$76	\$67	\$58	\$49	\$39	\$30	\$21	\$12	\$6	\$0	\$0
610	620	79	69	59	50	41	32	22	13	7	1	0
620	630	81	70	61	52	42	33	24	15	8	2	0
630	640	84	72	62	53	44	35	25	16	9	3	0
640	650	86	73	64	55	45	36	27	18	10	4	0
650	660	89	75	65	56	47	38	28	19	11	5	0
660	670	91	76	67	58	48	39	30	21	12	6	0
670	680	94	78	68	59	50	41	31	22	13	7	1
680	690	96	81	70	61	51	42	33	24	14	8	2
690	700	99	83	71	62	53	44	34	25	16	9	3
700	710	101	86	73	64	54	45	36	27	17	10	4
710	720	104	88	74	65	56	47	37	28	19	11	5
720	730	106	91	76	67	57	48	39	30	20	12	6
730	740	109	93	78	68	59	50	40	31	22	13	7
740	750	111	96	80	70	60	51	42	33	23	14	8
750	760	114	98	83	71	62	53	43	34	25	16	9
760	770	116	101	85	73	63	54	45	36	26	17	10
770	780	119	103	88	74	65	56	46	37	28	19	11
780	790	121	106	90	76	66	57	48	39	29	20	12
790	800	124	108	93	78	68	59	49	40	31	22	13
800	810	126	111	95	80	69	60	51	42	32	23	14
810	820	129	113	98	83	71	62	52	43	34	25	15
820	830	131	116	100	85	72	63	54	45	35	26	17
830	840	134	118	103	88	74	65	55	46	37	28	18
840	850	136	121	105	90	75	66	57	48	38	29	20
850	860	139	123	108	93	77	68	58	49	40	31	21
860	870	141	126	110	95	80	69	60	51	41	32	23
870	880	144	128	113	98	82	71	61	52	43	34	24
880	890	146	131	115	100	85	72	63	54	44	35	26
890	900	149	133	118	103	87	74	64	55	46	37	27
900	910	151	136	120	105	90	75	66	57	47	38	29
910	920	154	138	123	108	92	77	67	58	49	40	30
920	930	156	141	125	110	95	79	69	60	50	41	32
930	940	159	143	128	113	97	82	70	61	52	43	33
940	950	161	146	130	115	100	84	72	63	53	44	35
950	960	164	148	133	118	102	87	73	64	55	46	36
960	970	166	151	135	120	105	89	75	66	56	47	38
970	980	169	153	138	123	107	92	76	67	58	49	39
980	990	171	156	140	125	110	94	79	69	59	50	41
990	1,000	174	158	143	128	112	97	81	70	61	52	42
1,000	1,010	176	161	145	130	115	99	84	72	62	53	44
1,010	1,020	179	163	148	133	117	102	86	73	64	55	45
1,020	1,030	181	166	150	135	120	104	89	75	65	56	47
1,030	1,040	184	168	153	138	122	107	91	76	67	58	48
1,040	1,050	186	171	155	140	125	109	94	78	68	59	50
1,050	1,060	189	173	158	143	127	112	96	81	70	61	51
1,060	1,070	191	176	160	145	130	114	99	83	71	62	53
1,070	1,080	194	178	163	148	132	117	101	86	73	64	54
1,080	1,090	196	181	165	150	135	119	104	88	74	65	56
1,090	1,100	199	183	168	153	137	122	106	91	76	67	57
1,100	1,110	201	186	170	155	140	124	109	93	78	68	59
1,110	1,120	204	188	173	158	142	127	111	96	81	70	60
1,120	1,130	206	191	175	160	145	129	114	98	83	71	62
1,130	1,140	209	193	178	163	147	132	116	101	86	73	63
1,140	1,150	211	196	180	165	150	134	119	103	88	74	65
1,150	1,160	214	198	183	168	152	137	121	106	91	76	66
1,160	1,170	216	201	185	170	155	139	124	108	93	78	68
1,170	1,180	219	203	188	173	157	142	126	111	96	80	69
1,180	1,190	221	206	190	175	160	144	129	113	98	83	71
1,190	1,200	224	208	193	178	162	147	131	116	101	85	72
1,200	1,210	226	211	195	180	165	149	134	118	103	88	74
1,210	1,220	229	213	198	183	167	152	136	121	106	90	75
1,220	1,230	231	216	200	185	170	154	139	123	108	93	77
1,230	1,240	234	218	203	188	172	157	141	126	111	95	80
1,240	1,250	236	221	206	190	175	159	144	128	113	98	82



**MARRIED Persons—WEEKLY Payroll Period**

(For Wages Paid)

If the wages are—		And the number of withholding allowances claimed is—										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10
The amount of income tax to be withheld is—												
\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
125	130	0	0	0	0	0	0	0	0	0	0	0
130	135	0	0	0	0	0	0	0	0	0	0	0
135	140	0	0	0	0	0	0	0	0	0	0	0
140	145	0	0	0	0	0	0	0	0	0	0	0
145	150	0	0	0	0	0	0	0	0	0	0	0
150	155	0	0	0	0	0	0	0	0	0	0	0
155	160	0	0	0	0	0	0	0	0	0	0	0
160	165	1	0	0	0	0	0	0	0	0	0	0
165	170	1	0	0	0	0	0	0	0	0	0	0
170	175	2	0	0	0	0	0	0	0	0	0	0
175	180	2	0	0	0	0	0	0	0	0	0	0
180	185	3	0	0	0	0	0	0	0	0	0	0
185	190	3	0	0	0	0	0	0	0	0	0	0
190	195	4	0	0	0	0	0	0	0	0	0	0
195	200	4	0	0	0	0	0	0	0	0	0	0
200	210	5	0	0	0	0	0	0	0	0	0	0
210	220	6	0	0	0	0	0	0	0	0	0	0
220	230	7	1	0	0	0	0	0	0	0	0	0
230	240	8	2	0	0	0	0	0	0	0	0	0
240	250	9	3	0	0	0	0	0	0	0	0	0
250	260	10	4	0	0	0	0	0	0	0	0	0
260	270	11	5	0	0	0	0	0	0	0	0	0
270	280	12	6	0	0	0	0	0	0	0	0	0
280	290	13	7	1	0	0	0	0	0	0	0	0
290	300	14	8	2	0	0	0	0	0	0	0	0
300	310	15	9	3	0	0	0	0	0	0	0	0
310	320	16	10	4	0	0	0	0	0	0	0	0
320	330	17	11	5	0	0	0	0	0	0	0	0
330	340	18	12	6	0	0	0	0	0	0	0	0
340	350	19	13	7	1	0	0	0	0	0	0	0
350	360	20	14	8	2	0	0	0	0	0	0	0
360	370	21	15	9	3	0	0	0	0	0	0	0
370	380	22	16	10	4	0	0	0	0	0	0	0
380	390	23	17	11	5	0	0	0	0	0	0	0
390	400	24	18	12	6	0	0	0	0	0	0	0
400	410	25	19	13	7	1	0	0	0	0	0	0
410	420	26	20	14	8	2	0	0	0	0	0	0
420	430	27	21	15	9	3	0	0	0	0	0	0
430	440	28	22	16	10	4	0	0	0	0	0	0
440	450	30	23	17	11	5	0	0	0	0	0	0
450	460	31	24	18	12	6	0	0	0	0	0	0
460	470	33	25	19	13	7	0	0	0	0	0	0
470	480	34	26	20	14	8	1	0	0	0	0	0
480	490	36	27	21	15	9	2	0	0	0	0	0
490	500	37	28	22	16	10	3	0	0	0	0	0
500	510	39	29	23	17	11	4	0	0	0	0	0
510	520	40	31	24	18	12	5	0	0	0	0	0
520	530	42	32	25	19	13	6	0	0	0	0	0
530	540	43	34	26	20	14	7	1	0	0	0	0
540	550	45	35	27	21	15	8	2	0	0	0	0
550	560	46	37	28	22	16	9	3	0	0	0	0
560	570	48	38	29	23	17	10	4	0	0	0	0
570	580	49	40	31	24	18	11	5	0	0	0	0
580	590	51	41	32	25	19	12	6	0	0	0	0
590	600	52	43	34	26	20	13	7	1	0	0	0
600	610	54	44	35	27	21	14	8	2	0	0	0
610	620	55	46	37	28	22	15	9	3	0	0	0
620	630	57	47	38	29	23	16	10	4	0	0	0
630	640	58	49	40	30	24	17	11	5	0	0	0
640	650	60	50	41	32	25	18	12	6	0	0	0
650	660	61	52	43	33	26	19	13	7	1	0	0
660	670	63	53	44	35	27	20	14	8	2	0	0
670	680	64	55	46	36	28	21	15	9	3	0	0
680	690	66	56	47	38	29	22	16	10	4	0	0
690	700	67	58	49	39	30	23	17	11	5	0	0
700	710	69	59	50	41	32	24	18	12	6	0	0
710	720	70	61	52	42	33	25	19	13	7	1	0
720	730	72	62	53	44	35	26	20	14	8	2	0
730	740	73	64	55	45	36	27	21	15	9	3	0



**MARRIED Persons—WEEKLY Payroll Period**  
(For Wages Paid)

If the wages are—		And the number of withholding allowances claimed is—										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10
		The amount of income tax to be withheld is—										
\$740	\$750	\$75	\$66	\$56	\$47	\$38	\$28	\$22	\$16	\$10	\$4	\$0
750	760	76	67	58	48	39	30	23	17	11	5	0
760	770	78	68	59	50	41	31	24	18	12	6	0
770	780	79	70	61	51	42	33	25	19	13	7	1
780	790	81	71	62	53	44	34	26	20	14	8	2
790	800	82	73	64	54	45	36	27	21	15	9	3
800	810	84	74	65	56	47	37	28	22	16	10	4
810	820	85	76	67	57	48	39	30	23	17	11	5
820	830	87	77	68	59	50	40	31	24	18	12	6
830	840	88	79	70	60	51	42	33	25	19	13	7
840	850	90	80	71	62	53	43	34	26	20	14	8
850	860	91	82	73	63	54	45	36	27	21	15	9
860	870	93	83	74	65	56	46	37	28	22	16	10
870	880	94	85	76	66	57	48	39	30	23	17	11
880	890	96	86	77	68	59	49	40	31	24	18	12
890	900	97	88	79	69	60	51	42	33	25	19	13
900	910	99	89	80	71	62	52	43	34	26	20	14
910	920	100	91	82	72	63	54	45	36	27	21	15
920	930	102	92	83	74	65	55	46	37	28	22	16
930	940	103	94	85	75	66	57	48	39	29	23	17
940	950	105	95	86	77	68	58	49	40	31	24	18
950	960	106	97	88	78	69	60	51	42	32	25	19
960	970	108	98	89	80	71	61	52	43	34	26	20
970	980	109	100	91	81	72	63	54	45	35	27	21
980	990	111	101	92	83	74	64	55	46	37	28	22
990	1,000	112	103	94	84	75	66	57	48	38	29	23
1,000	1,010	114	104	96	86	77	67	58	49	40	31	24
1,010	1,020	115	106	97	87	78	69	60	51	41	32	25
1,020	1,030	117	107	98	89	80	70	61	52	43	34	26
1,030	1,040	118	109	100	90	81	72	63	54	44	35	27
1,040	1,050	120	110	101	92	83	73	64	55	46	37	28
1,050	1,060	121	112	103	93	84	75	66	57	47	38	29
1,060	1,070	123	113	104	95	86	76	67	58	49	40	30
1,070	1,080	124	115	106	96	87	78	69	60	50	41	32
1,080	1,090	126	116	107	98	89	79	70	61	52	43	33
1,090	1,100	127	118	109	99	90	81	72	63	53	44	35
1,100	1,110	129	119	110	101	92	82	73	64	55	46	36
1,110	1,120	130	121	112	102	93	84	75	66	56	47	38
1,120	1,130	132	122	113	104	95	85	76	67	58	49	39
1,130	1,140	133	124	115	105	96	87	78	69	59	50	41
1,140	1,150	135	125	116	107	98	88	79	70	61	52	42
1,150	1,160	136	127	118	108	99	90	81	72	62	53	44
1,160	1,170	138	128	119	110	101	91	82	73	64	55	45
1,170	1,180	139	130	121	111	102	93	84	75	65	56	47
1,180	1,190	141	131	122	113	104	94	85	76	67	58	48
1,190	1,200	142	133	124	114	105	96	87	78	68	59	50
1,200	1,210	144	134	125	116	107	97	88	79	70	61	51
1,210	1,220	145	136	127	117	108	99	90	81	71	62	53
1,220	1,230	147	137	128	119	110	100	91	82	73	64	54
1,230	1,240	148	139	130	120	111	102	93	84	74	65	56
1,240	1,250	150	140	131	122	113	103	94	85	76	67	57
1,250	1,260	151	142	133	123	114	105	96	87	77	68	59
1,260	1,270	153	143	134	125	116	106	97	88	79	70	60
1,270	1,280	154	145	136	126	117	108	99	90	80	71	62
1,280	1,290	157	146	137	128	119	109	100	91	82	73	63
1,290	1,300	159	148	139	129	120	111	102	93	83	74	65
1,300	1,310	162	149	140	131	122	112	103	94	85	76	66
1,310	1,320	164	151	142	132	123	114	105	96	86	77	68
1,320	1,330	167	152	143	134	125	115	106	97	88	79	69
1,330	1,340	169	154	145	135	126	117	108	99	89	80	71
1,340	1,350	172	156	146	137	128	118	109	100	91	82	72
1,350	1,360	174	159	148	138	129	120	111	102	92	83	74
1,360	1,370	177	161	149	140	131	121	112	103	94	85	75
1,370	1,380	179	164	151	141	132	123	114	105	96	86	77
1,380	1,390	182	166	152	143	134	124	115	106	97	88	78
1,390	1,400	184	169	154	144	135	126	117	108	98	89	80

Department of the Treasury—Internal Revenue Service  
**Form 1040EZ** **Income Tax Return for Single and Joint Filers With No Dependents** (99)  
 OMB No. 1545-0675

**Label**  
 (See page 11.)  
 Use the IRS label.  
 Otherwise, please print or type.

**L A B E L H E R E**

Your first name and initial	Last name
If a joint return, spouse's first name and initial	Last name
Home address (number and street). If you have a P.O. box, see page 11.	Apt. no.
City, town or post office, state, and ZIP code. If you have a foreign address, see page 11.	

Your social security number  
 \_\_\_\_\_  
 Spouse's social security number  
 \_\_\_\_\_

**▲ Important! ▲**  
 You must enter your SSN(s) above.

**Presidential Election Campaign**  
 (page 11)

Note. Checking "Yes" will not change your tax or reduce your refund.  
 Do you, or your spouse if a joint return, want \$3 to go to this fund? . . . . .  
 You  Yes  No Spouse  Yes  No

**Income**  
 Attach Form(s) W-2 here.  
 Enclose, but do not attach any payment.

<b>1</b> Wages, salaries, and tips. This should be shown in box 1 of your Form(s) W-2. Attach your Form(s) W-2.	1
<b>2</b> Taxable interest. If the total is over \$1,500, you cannot use Form 1040EZ.	2
<b>3</b> Unemployment compensation and Alaska Permanent Fund dividends (see page 13).	3
<b>4</b> Add lines 1, 2, and 3. This is your <b>adjusted gross income</b> .	4
<b>5</b> Can your parents (or someone else) claim you on their return? Yes. Enter amount from worksheet on back. <input type="checkbox"/> No. If single, enter \$7,950. If married filing jointly, enter \$15,000. See back for explanation. <input type="checkbox"/>	5
<b>6</b> Subtract line 5 from line 4. If line 5 is larger than line 4, enter -0-. This is your <b>taxable income</b> .	6

Note. You must check Yes or No.

**Payments and tax**

<b>7</b> Federal income tax withheld from box 2 of your Form(s) W-2.	7
<b>8a</b> Earned income credit (EIC).	8a
<b>b</b> Nontaxable combat pay election. <b>8b</b>	
<b>9</b> Add lines 7 and 8a. These are your <b>total payments</b> .	9
<b>10</b> Tax. Use the amount on line 6 above to find your tax in the tax table on pages 24-32 of the booklet. Then, enter the tax from the table on this line.	10

**Refund**

**11a** If line 9 is larger than line 10, subtract line 10 from line 9. This is your **refund**. ▶ 11a

▶ **b** Routing number  ▶ **c** Type:  Checking  Savings

▶ **d** Account number

**Amount you owe**

**12** If line 10 is larger than line 9, subtract line 9 from line 10. This is the **amount you owe**. For details on how to pay, see page 19. ▶ 12

**Third party designee**

Do you want to allow another person to discuss this return with the IRS (see page 19)?  Yes. Complete the following.  No

Designee's name ▶ Phone no. ( ) ▶ Personal identification number (PIN) ▶

**Sign here**

Under penalties of perjury, I declare that I have examined this return, and to the best of my knowledge and belief, it is true, correct, and accurately lists all amounts and sources of income I received during the tax year. Declaration of preparer (other than the taxpayer) is based on all information of which the preparer has any knowledge.

Your signature	Date	Your occupation	Daytime phone number ( )
Spouse's signature. If a joint return, both must sign.	Date	Spouse's occupation	

**Paid preparer's use only**

Preparer's signature ▶	Date	Check if self-employed <input type="checkbox"/>	Preparer's SSN or PTIN
Firm's name (or yours if self-employed), address, and ZIP code ▶	EIN	Phone no. ( )	

**Use this form if**

- Your filing status is single or married filing jointly. If you are not sure about your filing status, see page 11.
- You (and your spouse if married filing jointly) were under age 65 and not blind at the end of 20--. If you were born on January 1, 19--, you are considered to be age 65 at the end of 20--.
- You do not claim any dependents. For information on dependents, use TeleTax topic 354 (see page 6).
- Your taxable income (line 6) is less than \$100,000.
- You do not claim any adjustments to income. For information on adjustments to income, use TeleTax topics 451-458 (see page 6).
- The only tax credit you can claim is the earned income credit. For information on credits, use TeleTax topics 601-608 and 610 (see page 6).
- You had only wages, salaries, tips, taxable scholarship or fellowship grants, unemployment compensation, or Alaska Permanent Fund dividends, and your taxable interest was not over \$1,500. But if you earned tips, including allocated tips, that are not included in box 5 and box 7 of your Form W-2, you may not be able to use Form 1040EZ (see page 12). If you are planning to use Form 1040EZ for a child who received Alaska Permanent Fund dividends, see page 13.
- You did not receive any advance earned income credit payments.  
If you cannot use this form, use TeleTax topic 352 (see page 6).

**Filling in your return**

For tips on how to avoid common mistakes, see page 20.

If you received a scholarship or fellowship grant or tax-exempt interest income, such as on municipal bonds, see the booklet before filling in the form. Also, see the booklet if you received a Form 1099-INT showing federal income tax withheld or if federal income tax was withheld from your unemployment compensation or Alaska Permanent Fund dividends.

Remember, you must report all wages, salaries, and tips even if you do not get a Form W-2 from your employer. You must also report all your taxable interest, including interest from banks, savings and loans, credit unions, etc., even if you do not get a Form 1099-INT.

**Worksheet for dependents who checked "Yes" on line 5**

(keep a copy for your records)

Use this worksheet to figure the amount to enter on line 5 if someone can claim you (or your spouse if married filing jointly) as a dependent, even if that person chooses not to do so. To find out if someone can claim you as a dependent, use TeleTax topic 354 (see page 6).

A. Amount, if any, from line 1 on front	_____	+ 250.00	Enter total ▶	A. _____
B. Minimum standard deduction				B. 800.00
C. Enter the <b>larger</b> of line A or line B here				C. _____
D. Maximum standard deduction. If <b>single</b> , enter \$4,850; if <b>married filing jointly</b> , enter \$9,700				D. _____
E. Enter the <b>smaller</b> of line C or line D here. This is your standard deduction				E. _____
F. Exemption amount.				} F. _____
• If single, enter -0-.				
• If married filing jointly and— —both you and your spouse can be claimed as dependents, enter -0-. —only one of you can be claimed as a dependent, enter \$3,100.				
G. Add lines E and F. Enter the total here and on line 5 on the front				G. _____

If you checked "No" on line 5 because no one can claim you (or your spouse if married filing jointly) as a dependent, enter on line 5 the amount shown below that applies to you.

- Single, enter \$7,950. This is the total of your standard deduction (\$4,850) and your exemption (\$3,100).
- Married filing jointly, enter \$15,900. This is the total of your standard deduction (\$9,700), your exemption (\$3,100), and your spouse's exemption (\$3,100).

**Mailing return**

Mail your return by **April 15**. Use the envelope that came with your booklet. If you do not have that envelope or if you moved during the year, see the back cover for the address to use.

**Annual Percentage Rate Table for Monthly Payment Plans**

# of Pmts. ▼	Annual Percentage Rate (Finance Charge per \$100 of Amount Financed)									
	2.00%	2.25%	2.50%	2.75%	3.00%	3.25%	3.50%	3.75%	4.00%	4.25%
6	\$ 0.58	\$ 0.66	\$ 0.73	\$ 0.80	\$ 0.88	\$ 0.95	\$ 1.02	\$ 1.10	\$ 1.17	\$ 1.24
12	1.09	1.22	1.36	1.50	1.63	1.77	1.91	2.04	2.18	2.32
18	1.59	1.79	1.99	2.19	2.39	2.59	2.79	2.99	3.20	3.40
24	2.10	2.36	2.62	2.89	3.15	3.42	3.69	3.95	4.22	4.49
30	2.60	2.93	3.26	3.59	3.92	4.25	4.58	4.92	5.25	5.58
36	3.11	3.51	3.90	4.30	4.69	5.09	5.49	5.89	6.29	6.69
42	3.62	4.08	4.54	5.00	5.47	5.93	6.40	6.86	7.33	7.80
48	4.14	4.66	5.19	5.72	6.24	6.78	7.31	7.84	8.38	8.92
54	4.65	5.24	5.83	6.43	7.03	7.63	8.23	8.83	9.44	10.04
60	5.17	5.82	6.48	7.15	7.81	8.48	9.15	9.82	10.50	11.18
	<b>4.50%</b>	<b>4.75%</b>	<b>5.00%</b>	<b>5.25%</b>	<b>5.50%</b>	<b>5.75%</b>	<b>6.00%</b>	<b>6.25%</b>	<b>6.50%</b>	<b>6.75%</b>
6	\$ 1.32	\$ 1.39	\$ 1.46	\$ 1.54	\$ 1.61	\$ 1.68	\$ 1.76	\$ 1.83	\$ 1.90	\$ 1.98
12	2.45	2.59	2.73	2.87	3.00	3.14	3.28	3.42	3.56	3.69
18	3.60	3.80	4.00	4.21	4.41	4.61	4.82	5.02	5.22	5.43
24	4.75	5.02	5.29	5.56	5.83	6.10	6.37	6.64	6.91	7.18
30	5.92	6.25	6.59	6.92	7.26	7.60	7.94	8.28	8.61	8.96
36	7.09	7.49	7.90	8.30	8.71	9.11	9.52	9.93	10.34	10.75
42	8.27	8.74	9.91	9.69	10.16	10.64	11.12	11.60	12.08	12.56
48	9.46	10.00	10.54	11.09	11.63	12.18	12.73	13.28	13.83	14.39
54	10.65	11.26	11.88	12.49	13.11	13.73	14.36	14.98	15.61	16.23
60	11.86	12.54	13.23	13.92	14.61	15.30	16.00	16.70	17.40	18.10
	<b>7.00%</b>	<b>7.25%</b>	<b>7.50%</b>	<b>7.75%</b>	<b>8.00%</b>	<b>8.25%</b>	<b>8.50%</b>	<b>8.75%</b>	<b>9.00%</b>	<b>9.25%</b>
6	\$ 2.05	\$ 2.13	\$ 2.20	\$ 2.27	\$ 2.35	\$ 2.42	\$ 2.49	\$ 2.57	\$ 2.64	\$ 2.72
12	3.83	3.97	4.11	4.25	4.39	4.52	4.66	4.80	4.94	5.08
18	5.63	5.84	6.04	6.25	6.45	6.66	6.86	7.07	7.28	7.48
24	7.45	7.73	8.00	8.27	8.55	8.82	9.09	9.37	9.64	9.92
30	9.30	9.64	9.98	10.32	10.66	11.01	11.35	11.70	12.04	12.39
36	11.16	11.57	11.98	12.40	12.81	13.23	13.64	14.06	14.48	14.90
42	13.04	13.52	14.01	14.50	14.98	15.47	15.96	16.45	16.95	17.44
48	14.94	15.50	16.06	16.62	17.18	17.75	18.31	18.88	19.45	20.02
54	16.86	17.50	18.13	18.77	19.41	20.05	20.69	21.34	21.98	22.63
60	18.81	19.52	20.23	20.94	21.66	22.38	23.10	23.82	24.55	25.28
	<b>9.50%</b>	<b>9.75%</b>	<b>10.00%</b>	<b>10.25%</b>	<b>10.50%</b>	<b>10.75%</b>	<b>11.00%</b>	<b>11.25%</b>	<b>11.50%</b>	<b>11.75%</b>
6	\$ 2.79	\$ 2.86	\$ 2.94	\$ 3.01	\$ 3.08	\$ 3.16	\$ 3.23	\$ 3.31	\$ 3.38	\$ 3.45
12	5.22	5.36	5.50	5.64	5.78	5.92	6.06	6.20	6.34	6.48
18	7.69	7.90	8.10	8.31	8.52	8.73	8.93	9.14	9.35	9.56
24	10.19	10.47	10.75	11.02	11.30	11.58	11.86	12.14	12.42	12.70
30	12.74	13.09	13.43	13.78	14.13	14.48	14.83	15.19	15.54	15.89
36	15.32	15.74	16.16	16.58	17.01	17.43	17.86	18.29	18.71	19.14
42	17.94	18.43	18.93	19.43	19.93	20.43	20.93	21.44	21.94	22.45
48	20.59	21.16	21.74	22.32	22.90	23.48	24.06	24.64	25.23	25.81
54	23.28	23.94	24.59	25.25	25.91	26.57	27.23	27.90	28.56	29.23
60	26.01	26.75	27.48	28.22	28.96	29.71	30.45	31.20	31.96	32.71

<b>Annual Percentage Rate Table for Monthly Payment Plans</b>											
# of Pmts. ▼	Annual Percentage Rate (Finance Charge per \$100 of Amount Financed)										
	12.00%	12.25%	12.50%	12.75%	13.00%	13.25%	13.50%	13.75%	14.00%	14.25%	
6	\$ 3.53	\$ 3.60	\$ 3.68	\$ 3.75	\$ 3.83	\$ 3.90	\$ 3.97	\$ 4.05	\$ 4.12	\$ 4.20	
12	6.62	6.76	6.90	7.04	7.18	7.32	7.46	7.60	7.74	7.89	
18	9.77	9.98	10.19	10.40	10.61	10.82	11.03	11.24	11.45	11.66	
24	12.98	13.26	13.54	13.82	14.10	14.38	14.66	14.95	15.23	15.51	
30	16.24	16.60	16.95	17.31	17.66	18.02	18.38	18.74	19.10	19.45	
36	19.57	20.00	20.43	20.87	21.30	21.73	22.17	22.60	23.04	23.48	
42	22.96	23.47	23.98	24.49	25.00	25.51	26.03	26.55	27.06	27.58	
48	26.40	26.99	27.58	28.18	28.77	29.37	29.97	30.57	31.17	31.77	
54	29.91	30.58	31.25	31.93	32.61	33.29	33.98	34.66	35.35	36.04	
60	33.47	34.23	34.99	35.75	36.52	37.29	38.06	38.83	39.61	40.39	
	<b>14.50%</b>	<b>14.75%</b>	<b>15.00%</b>	<b>15.25%</b>	<b>15.50%</b>	<b>15.75%</b>	<b>16.00%</b>	<b>16.25%</b>	<b>16.50%</b>	<b>16.75%</b>	
6	\$ 4.27	\$ 4.35	\$ 4.42	\$ 4.49	\$ 4.57	\$ 4.64	\$ 4.72	\$ 4.79	\$ 4.87	\$ 4.94	
12	8.03	8.17	8.31	8.45	8.59	8.74	8.88	9.02	9.16	9.30	
18	11.87	12.08	12.29	12.50	12.72	12.93	13.14	13.35	13.57	13.78	
24	15.80	16.08	16.37	16.65	16.94	17.22	17.51	17.80	18.09	18.37	
30	19.81	20.17	20.54	20.90	21.26	21.62	21.99	22.35	22.72	23.08	
36	23.92	24.35	24.80	25.24	25.68	26.12	26.57	27.01	27.46	27.90	
42	28.10	28.62	29.15	29.67	30.19	30.72	31.25	31.78	32.31	32.84	
48	32.37	32.98	33.59	34.20	34.81	35.42	36.03	36.65	37.27	37.88	
54	36.73	37.42	38.12	38.82	39.52	40.22	40.92	41.63	42.33	43.04	
60	41.17	41.95	42.74	43.53	44.32	45.11	45.91	46.71	47.51	48.31	
	<b>17.00%</b>	<b>17.25%</b>	<b>17.50%</b>	<b>17.75%</b>	<b>18.00%</b>	<b>18.25%</b>	<b>18.50%</b>	<b>18.75%</b>	<b>19.00%</b>	<b>19.25%</b>	<b>19.50%</b>
6	\$ 5.02	\$ 5.09	\$ 5.17	\$ 5.24	\$ 5.32	\$ 5.39	\$ 5.46	\$ 5.54	\$ 5.61	\$ 5.69	\$ 5.76
12	9.45	9.59	9.73	9.87	10.02	10.16	10.30	10.44	10.59	10.73	10.87
18	13.99	14.21	14.42	14.64	14.85	15.07	15.28	15.49	15.71	15.93	16.14
24	18.66	18.95	19.24	19.53	19.82	20.11	20.40	20.69	20.98	21.27	21.56
30	23.45	23.81	24.18	24.55	24.92	25.29	25.66	26.03	26.40	26.77	27.14
36	28.35	28.80	29.25	29.70	30.15	30.60	31.05	31.51	31.96	32.42	32.87
42	33.37	33.90	34.44	34.97	35.51	36.05	36.59	37.13	37.67	38.21	38.76
48	38.50	39.13	39.75	40.37	41.00	41.63	42.26	42.89	43.52	44.15	44.79
54	43.75	44.47	45.18	45.90	46.62	47.34	48.06	48.79	49.51	50.24	50.97
60	49.12	49.92	50.73	51.55	52.36	53.18	54.00	54.82	55.64	56.47	57.30
	<b>19.75%</b>	<b>20.00%</b>	<b>20.25%</b>	<b>20.50%</b>	<b>20.75%</b>	<b>21.00%</b>	<b>21.25%</b>	<b>21.50%</b>	<b>21.75%</b>	<b>22.00%</b>	<b>22.25%</b>
6	\$ 5.84	\$ 5.91	\$ 5.99	\$ 6.06	\$ 6.14	\$ 6.21	\$ 6.29	\$ 6.36	\$ 6.44	\$ 6.51	\$ 6.59
12	11.02	11.16	11.31	11.45	11.59	11.74	11.88	12.02	12.17	12.31	12.46
18	16.36	16.57	16.79	17.01	17.22	17.44	17.66	17.88	18.09	18.31	18.53
24	21.86	22.15	22.44	22.74	23.03	23.33	23.62	23.92	24.21	24.51	24.80
30	27.52	27.89	28.26	28.64	29.01	29.39	29.77	30.14	30.52	30.90	31.28
36	33.33	33.79	34.25	34.71	35.17	35.63	36.09	36.56	37.02	37.49	37.95
42	39.30	39.85	40.40	40.95	41.50	42.05	42.60	43.15	43.71	44.26	44.82
48	45.43	46.07	46.71	47.35	47.99	48.64	49.28	49.93	50.58	51.23	51.88
54	51.70	52.44	53.17	53.91	54.65	55.39	56.14	56.88	57.63	58.38	59.13
60	58.13	58.96	59.80	60.64	61.48	62.32	63.17	64.01	64.86	65.71	66.57



**Amount of \$1.00 at 5.5 Percent, Compounded Daily (365-Day Year)**

Day	Amount	Day	Amount	Day	Amount	Day	Amount	Day	Amount
1	1.00015	11	1.00165	21	1.00316	31	1.00468	50	1.00755
2	1.00030	12	1.00180	22	1.00331	32	1.00483	60	1.00907
3	1.00045	13	1.00196	23	1.00347	33	1.00498	70	1.01059
4	1.00060	14	1.00211	24	1.00362	34	1.00513	80	1.01212
5	1.00075	15	1.00226	25	1.00377	35	1.00528	90	1.01364
6	1.00090	16	1.00241	26	1.00392	36	1.00543	100	1.01517
7	1.00105	17	1.00256	27	1.00407	37	1.00558	110	1.01670
8	1.00120	18	1.00271	28	1.00422	38	1.00574	120	1.01823
9	1.00135	19	1.00286	29	1.00437	39	1.00589	130	1.01977
10	1.00150	20	1.00301	30	1.00452	40	1.00604	140	1.02131

**Elapsed Time Table**

**The Number of Each Day of the Year**

Day No.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1	32	60	91	121	152	182	213	244	274	305	335
2	2	33	61	92	122	153	183	214	245	275	306	336
3	3	34	62	93	123	154	184	215	246	276	307	337
4	4	35	63	94	124	155	185	216	247	277	308	338
5	5	36	64	95	125	156	186	217	248	278	309	339
6	6	37	65	96	126	157	187	218	249	279	310	340
7	7	38	66	97	127	158	188	219	250	280	311	341
8	8	39	67	98	128	159	189	220	251	281	312	342
9	9	40	68	99	129	160	190	221	252	282	313	343
10	10	41	69	100	130	161	191	222	253	283	314	344
11	11	42	70	101	131	162	192	223	254	284	315	345
12	12	43	71	102	132	163	193	224	255	285	316	346
13	13	44	72	103	133	164	194	225	256	286	317	347
14	14	45	73	104	134	165	195	226	257	287	318	348
15	15	46	74	105	135	166	196	227	258	288	319	349
16	16	47	75	106	136	167	197	228	259	289	320	350
17	17	48	76	107	137	168	198	229	260	290	321	351
18	18	49	77	108	138	169	199	230	261	291	322	352
19	19	50	78	109	139	170	200	231	262	292	323	353
20	20	51	79	110	140	171	201	232	263	293	324	354
21	21	52	80	111	141	172	202	233	264	294	325	355
22	22	53	81	112	142	173	203	234	265	295	326	356
23	23	54	82	113	143	174	204	235	266	296	327	357
24	24	55	83	114	144	175	205	236	267	297	328	358
25	25	56	84	115	145	176	206	237	268	298	329	359
26	26	57	85	116	146	177	207	238	269	299	330	360
27	27	58	86	117	147	178	208	239	270	300	331	361
28	28	59*	87	118	148	179	209	240	271	301	332	362
29	29		88	119	149	180	210	241	272	302	333	363
30	30		89	120	150	181	211	242	273	303	334	364
31	31		90		151		212	243		304		365

\*Add one day for February 29 for leap year. (Leap years are 2004, 2008, and so on.)



Compound Interest—Amount of \$1.00										
Period "n"	Rate per Period									
	1.000%	1.250%	1.375%	1.500%	2.000%	2.500%	2.750%	2.875%	3.000%	3.125%
1	1.01000	1.01250	1.01375	1.01500	1.02000	1.02500	1.02750	1.02875	1.03000	1.03125
2	1.02010	1.02516	1.02769	1.03023	1.04040	1.05063	1.05576	1.05833	1.06090	1.06348
3	1.03030	1.03797	1.04182	1.04568	1.06121	1.07689	1.08479	1.08875	1.09273	1.09671
4	1.04060	1.05095	1.05614	1.06136	1.08243	1.10381	1.11462	1.12006	1.12551	1.13098
5	1.05101	1.06408	1.07067	1.07728	1.10408	1.13141	1.14527	1.15226	1.15927	1.16633
6	1.06152	1.07738	1.08539	1.09344	1.12616	1.15969	1.17677	1.18538	1.19405	1.20277
7	1.07214	1.09085	1.10031	1.10984	1.14869	1.18869	1.20913	1.21946	1.22987	1.24036
8	1.08286	1.10449	1.11544	1.12649	1.17166	1.21840	1.24238	1.25452	1.26677	1.27912
9	1.09369	1.11829	1.13078	1.14339	1.19509	1.24886	1.27655	1.29059	1.30477	1.31909
10	1.10462	1.13227	1.14633	1.16054	1.21899	1.28008	1.31165	1.32770	1.34392	1.36032
11	1.11567	1.14642	1.16209	1.17795	1.24337	1.31209	1.34772	1.36587	1.38423	1.40283
12	1.12683	1.16075	1.17807	1.19562	1.26824	1.34489	1.38478	1.40514	1.42576	1.44666
13	1.13809	1.17526	1.19427	1.21355	1.29361	1.37851	1.42287	1.44553	1.46853	1.49187
14	1.14947	1.18995	1.21069	1.23176	1.31948	1.41297	1.46199	1.48709	1.51259	1.53849
15	1.16097	1.20483	1.22733	1.25023	1.34587	1.44830	1.50220	1.52985	1.55797	1.58657
16	1.17258	1.21989	1.24421	1.26899	1.37279	1.48451	1.54351	1.57383	1.60471	1.63615
17	1.18430	1.23514	1.26132	1.28802	1.40024	1.52162	1.58596	1.61908	1.65285	1.68728
18	1.19615	1.25058	1.27866	1.30734	1.42825	1.55966	1.62957	1.66563	1.70243	1.74001
19	1.20811	1.26621	1.29624	1.32695	1.45681	1.59865	1.67438	1.71351	1.75351	1.79438
20	1.22019	1.28204	1.31407	1.34686	1.48595	1.63862	1.72043	1.76278	1.80611	1.85046
21	1.23239	1.29806	1.33213	1.36706	1.51567	1.67958	1.76774	1.81346	1.86029	1.90828
22	1.24472	1.31429	1.35045	1.38756	1.54598	1.72157	1.81635	1.86559	1.91610	1.96792
23	1.25716	1.33072	1.36902	1.40838	1.57690	1.76461	1.86630	1.91923	1.97359	2.02942
24	1.26973	1.34735	1.38784	1.42950	1.60844	1.80873	1.91763	1.97441	2.03279	2.09284
25	1.28243	1.36419	1.40693	1.45095	1.64061	1.85394	1.97036	2.03117	2.09378	2.15824
26	1.29526	1.38125	1.42627	1.47271	1.67342	1.90029	2.02455	2.08957	2.15659	2.22568
27	1.30821	1.39851	1.44588	1.49480	1.70689	1.94780	2.08022	2.14964	2.22129	2.29523
28	1.32129	1.41599	1.46576	1.51722	1.74102	1.99650	2.13743	2.21144	2.28793	2.36696
29	1.33450	1.43369	1.48592	1.53998	1.77584	2.04641	2.19621	2.27502	2.35657	2.44093
30	1.34785	1.45161	1.50635	1.56308	1.81136	2.09757	2.25660	2.34043	2.42726	2.51721
31	1.36133	1.46976	1.52706	1.58653	1.84759	2.15001	2.31866	2.40772	2.50008	2.59587
32	1.37494	1.48813	1.54806	1.61032	1.88454	2.20376	2.38242	2.47694	2.57508	2.67699
33	1.38869	1.50673	1.56935	1.63448	1.92223	2.25885	2.44794	2.54815	2.65234	2.76065
34	1.40258	1.52557	1.59092	1.65900	1.96068	2.31532	2.51526	2.62141	2.73191	2.84692
35	1.41660	1.54464	1.61280	1.68388	1.99989	2.37321	2.58443	2.69677	2.81386	2.93588
36	1.43077	1.56394	1.63498	1.70914	2.03989	2.43254	2.65550	2.77431	2.89828	3.02763
37	1.44508	1.58349	1.65746	1.73478	2.08069	2.49335	2.72852	2.85407	2.98523	3.12224
38	1.45953	1.60329	1.68025	1.76080	2.12230	2.55568	2.80356	2.93612	3.07478	3.21981
39	1.47412	1.62333	1.70335	1.78721	2.16474	2.61957	2.88066	3.02054	3.16703	3.32043
40	1.48886	1.64362	1.72677	1.81402	2.20804	2.68506	2.95987	3.10738	3.26204	3.42419
41	1.50375	1.66416	1.75051	1.84123	2.25220	2.75219	3.04127	3.19671	3.35990	3.53120
42	1.51879	1.68497	1.77458	1.86885	2.29724	2.82100	3.12491	3.28862	3.46070	3.64155
43	1.53398	1.70603	1.79898	1.89688	2.34319	2.89152	3.21084	3.38317	3.56452	3.75535
44	1.54932	1.72735	1.82372	1.92533	2.39005	2.96381	3.29914	3.48043	3.67145	3.87270
45	1.56481	1.74895	1.84880	1.95421	2.43785	3.03790	3.38986	3.58050	3.78160	3.99373
46	1.58046	1.77081	1.87422	1.98353	2.48661	3.11385	3.48309	3.68344	3.89504	4.11853
47	1.59626	1.79294	1.89999	2.01328	2.53634	3.19170	3.57887	3.78933	4.01190	4.24723
48	1.61223	1.81535	1.92611	2.04348	2.58707	3.27149	3.67729	3.89828	4.13225	4.37996
49	1.62835	1.83805	1.95260	2.07413	2.63881	3.35328	3.77842	4.01035	4.25622	4.51683
50	1.64463	1.86102	1.97944	2.10524	2.69159	3.43711	3.88232	4.12565	4.38391	4.65798





**Future Value of an Ordinary Annuity for \$1.00 per Period**

Period "n"	Rate per Period									
	0.50%	1.00%	1.50%	2.00%	3.00%	4.00%	5.00%	6.00%	7.00%	8.00%
1	\$ 1.00000	\$ 1.00000	\$ 1.00000	\$ 1.00000	\$ 1.00000	\$ 1.00000	\$ 1.00000	\$ 1.00000	\$ 1.00000	\$ 1.00000
2	2.00500	2.01000	2.01500	2.02000	2.03000	2.04000	2.05000	2.06000	2.07000	2.08000
3	3.01502	3.03010	3.04522	3.06040	3.09090	3.12160	3.15250	3.18360	3.21490	3.24640
4	4.03010	4.06040	4.09090	4.12161	4.18363	4.24646	4.31013	4.37462	4.43994	4.50611
5	5.05025	5.10101	5.15227	5.20404	5.30914	5.41632	5.52563	5.63709	5.75074	5.86660
6	6.07550	6.15202	6.22955	6.30812	6.46841	6.63298	6.80191	6.97532	7.15329	7.33593
7	7.10588	7.21354	7.32299	7.43428	7.66246	7.89829	8.14201	8.39384	8.65402	8.92280
8	8.14141	8.28567	8.43284	8.58297	8.89234	9.21423	9.54911	9.89747	10.25980	10.63663
9	9.18212	9.36853	9.55933	9.75463	10.15911	10.58280	11.02656	11.49132	11.97799	12.48756
10	10.22803	10.46221	10.70272	10.94972	11.46388	12.00611	12.57789	13.18079	13.81645	14.48656
11	11.27917	11.56683	11.86326	12.16872	12.80780	13.48635	14.20679	14.97164	15.78360	16.64549
12	12.33556	12.68250	13.04121	13.41209	14.19203	15.02581	15.91713	16.86994	17.88845	18.97713
13	13.39724	13.80933	14.23683	14.68033	15.61779	16.62684	17.71298	18.88214	20.14064	21.49530
14	14.46423	14.94742	15.45038	15.97394	17.08632	18.29191	19.59863	21.01507	22.55049	24.21492
15	15.53655	16.09690	16.68214	17.29342	18.59891	20.02359	21.57856	23.27597	25.12902	27.15211
16	16.61423	17.25786	17.93237	18.63929	20.15688	21.82453	23.65749	25.67253	27.88805	30.32428
17	17.69730	18.43044	19.20136	20.01207	21.76159	23.69751	25.84037	28.21288	30.84022	33.75023
18	18.78579	19.61475	20.48938	21.41231	23.41444	25.64541	28.13238	30.90565	33.99903	37.45024
19	19.87972	20.81090	21.79672	22.84056	25.11687	27.67123	30.53900	33.75999	37.37896	41.44626
20	20.97912	22.01900	23.12367	24.29737	26.87037	29.77808	33.06595	36.78559	40.99549	45.76196
21	22.08401	23.23919	24.47052	25.78332	28.67649	31.96920	35.71925	39.99273	44.86518	50.42292
22	23.19443	24.47159	25.83758	27.29898	30.53678	34.24797	38.50521	43.39229	49.00574	55.45676
23	24.31040	25.71630	27.22514	28.84496	32.45288	36.61789	41.43048	46.99583	53.43614	60.89330
24	25.43196	26.97346	28.63352	30.42186	34.42647	39.08260	44.50200	50.81558	58.17667	66.76476
25	26.55912	28.24320	30.06302	32.03030	36.45926	41.64591	47.72710	54.86451	63.24904	73.10594
26	27.69191	29.52563	31.51397	33.67091	38.55304	44.31174	51.11345	59.15638	68.67647	79.95442
27	28.83037	30.82089	32.98668	35.34432	40.70963	47.08421	54.66913	63.70577	74.48382	87.35077
28	29.97452	32.12910	34.48148	37.05121	42.93092	49.96758	58.40258	68.52811	80.69769	95.33883
29	31.12439	33.45039	35.99870	38.79223	45.21885	52.96629	62.32271	73.63980	87.34653	103.96594
30	32.28002	34.78489	37.53868	40.56808	47.57542	56.08494	66.43885	79.05819	94.46079	113.28321
31	33.44142	36.13274	39.10176	42.37944	50.00268	59.32834	70.76079	84.80168	102.07304	123.34587
32	34.60862	37.49407	40.68829	44.22703	52.50276	62.70147	75.29883	90.88978	110.21815	134.21354
33	35.78167	38.86901	42.29861	46.11157	55.07784	66.20953	80.06377	97.34316	118.93343	145.95062
34	36.96058	40.25770	43.93309	48.03380	57.73018	69.85791	85.06696	104.18375	128.25876	158.62667
35	38.14538	41.66028	45.59209	49.99448	60.46208	73.65222	90.32031	111.43478	138.23688	172.31680
36	39.33610	43.07688	47.27597	51.99437	63.27594	77.59831	95.83632	119.12087	148.91346	187.10215
37	40.53279	44.50765	48.98511	54.03425	66.17422	81.70225	101.62814	127.26812	160.33740	203.07032
38	41.73545	45.95272	50.71989	56.11494	69.15945	85.97034	107.70955	135.90421	172.56102	220.31595
39	42.94413	47.41225	52.48068	58.23724	72.23423	90.40915	114.09502	145.05846	185.64029	238.94122
40	44.15885	48.88637	54.26789	60.40198	75.40126	95.02552	120.79977	154.76197	199.63511	259.05652
41	45.37964	50.37524	56.08191	62.61002	78.66330	99.82654	127.83976	165.04768	214.60957	280.78104
42	46.60654	51.87899	57.92314	64.86222	82.02320	104.81960	135.23175	175.95054	230.63224	304.24352
43	47.83957	53.39778	59.79199	67.15947	85.48389	110.01238	142.99334	187.50758	247.77650	329.58301
44	49.07877	54.93176	61.68887	69.50266	89.04841	115.41288	151.14301	199.75803	266.12085	356.94965
45	50.32416	56.48107	63.61420	71.89271	92.71986	121.02939	159.70016	212.74351	285.74931	386.50562
46	51.57578	58.04589	65.56841	74.33056	96.50146	126.87057	168.68516	226.50812	306.75176	418.42607
47	52.83366	59.62634	67.55194	76.81718	100.39650	132.94539	178.11942	241.09861	329.22439	452.90015
48	54.09783	61.22261	69.56522	79.35352	104.40840	139.26321	188.02539	256.56453	353.27009	490.13216
49	55.36832	62.83483	71.60870	81.94059	108.54065	145.83373	198.42666	272.95840	378.99900	530.34274
50	56.64516	64.46318	73.68283	84.57940	112.79687	152.66708	209.34800	290.33590	406.52893	573.77016



Monthly Payment for a \$1,000 Loan							
Interest Rate	Length of Loan in Years						
	10	15	20	25	30	35	40
5.00%	\$10.61	\$ 7.91	\$ 6.60	\$ 5.85	\$ 5.37	\$ 5.05	\$ 4.82
5.50%	10.85	8.17	6.88	6.14	5.68	5.37	5.16
6.00%	11.10	8.44	7.16	6.44	6.00	5.70	5.50
6.50%	11.35	8.71	7.46	6.75	6.32	6.04	5.85
7.00%	11.61	8.99	7.75	7.07	6.65	6.39	6.21
7.50%	11.87	9.27	8.06	7.39	6.99	6.74	6.58
8.00%	12.13	9.56	8.36	7.72	7.34	7.10	6.95
8.50%	12.40	9.85	8.68	8.05	7.69	7.47	7.33
9.00%	12.67	10.14	9.00	8.39	8.05	7.84	7.71
9.50%	12.94	10.44	9.32	8.74	8.41	8.22	8.10
10.00%	13.22	10.75	9.65	9.09	8.78	8.60	8.49
10.50%	13.49	11.05	9.98	9.44	9.15	8.98	8.89
11.00%	13.78	11.37	10.32	9.80	9.52	9.37	9.28
11.50%	14.06	11.68	10.66	10.16	9.90	9.76	9.68
12.00%	14.35	12.00	11.01	10.53	10.29	10.16	10.08
12.50%	14.64	12.33	11.36	10.90	10.67	10.55	10.49
13.00%	14.93	12.65	11.72	11.28	11.06	10.95	10.90

Monthly Payment on a Simple Interest Installment Loan of \$100											
Term in Months	Annual Percentage Rate										
	8.00%	9.00%	10.00%	11.00%	12.00%	13.00%	14.00%	15.00%	16.00%	17.00%	18.00%
6	17.06	17.11	17.16	17.21	17.25	17.30	17.35	17.40	17.45	17.50	17.55
12	8.70	8.75	8.79	8.84	8.88	8.93	8.98	9.03	9.07	9.12	9.17
18	5.91	5.96	6.01	6.05	6.10	6.14	6.19	6.24	6.29	6.33	6.38
24	4.52	4.57	4.61	4.66	4.71	4.75	4.80	4.85	4.90	4.94	4.99
30	3.69	3.73	3.78	3.83	3.87	3.92	3.97	4.02	4.07	4.11	4.16
36	3.13	3.18	3.23	3.27	3.32	3.37	3.42	3.47	3.52	3.57	3.62
42	2.74	2.78	2.83	2.88	2.93	2.98	3.03	3.07	3.12	3.18	3.23
48	2.44	2.49	2.54	2.58	2.63	2.68	2.73	2.78	2.83	2.89	2.94
54	2.21	2.26	2.31	2.36	2.41	2.46	2.51	2.56	2.61	2.66	2.72
60	2.03	2.08	2.12	2.17	2.22	2.28	2.33	2.38	2.43	2.49	2.54



**Amount of \$1.00 Invested—Daily, Monthly, and Quarterly Compounding**

Annual Rate	Interest Period—1 Year			Interest Period—4 Years		
	Daily	Monthly	Quarterly	Daily	Monthly	Quarterly
0.50%	1.005012	1.005011	1.005009	1.020201	1.020197	1.020189
0.75%	1.007528	1.007526	1.007521	1.030454	1.030445	1.030426
1.00%	1.010050	1.010046	1.010038	1.040810	1.040793	1.040759
1.25%	1.012578	1.012572	1.012559	1.051270	1.051244	1.051189
1.50%	1.015113	1.015104	1.015085	1.061835	1.061797	1.061717
1.75%	1.017654	1.017641	1.017615	1.072506	1.072453	1.072344
2.00%	1.020201	1.020184	1.020151	1.083285	1.083215	1.083071
2.25%	1.022754	1.022733	1.022691	1.094171	1.094082	1.093898
2.50%	1.025314	1.025288	1.025235	1.105167	1.105056	1.104827
2.75%	1.027881	1.027849	1.027785	1.116273	1.116138	1.115858
3.00%	1.030453	1.030416	1.030339	1.127491	1.127328	1.126992
3.25%	1.033032	1.032989	1.032898	1.138822	1.138628	1.138230
3.50%	1.035618	1.035567	1.035462	1.150266	1.150039	1.149574
3.75%	1.038210	1.038151	1.038031	1.161825	1.161563	1.161023
4.00%	1.040808	1.040742	1.040604	1.173501	1.173199	1.172579
4.25%	1.043413	1.043338	1.043182	1.185293	1.184949	1.184242
4.50%	1.046025	1.045940	1.045765	1.197204	1.196814	1.196015
4.75%	1.048643	1.048548	1.048353	1.209235	1.208796	1.207897
5.00%	1.051267	1.051162	1.050945	1.221386	1.220895	1.219890
5.25%	1.053899	1.053782	1.053543	1.233659	1.233113	1.231994
5.50%	1.056536	1.056408	1.056145	1.246056	1.245451	1.244211
5.75%	1.059180	1.059040	1.058752	1.258577	1.257909	1.256541
6.00%	1.061831	1.061678	1.061364	1.271224	1.270489	1.268986
6.25%	1.064489	1.064322	1.063980	1.283998	1.283193	1.281546
6.50%	1.067153	1.066972	1.066602	1.296900	1.296020	1.294222
6.75%	1.069824	1.069628	1.069228	1.309932	1.308974	1.307017
7.00%	1.072501	1.072290	1.071859	1.323094	1.322054	1.319929
7.25%	1.075185	1.074958	1.074495	1.336389	1.335262	1.332962
7.50%	1.077876	1.077633	1.077136	1.349817	1.348599	1.346114
7.75%	1.080573	1.080313	1.079782	1.363380	1.362067	1.359389
8.00%	1.083278	1.083000	1.082432	1.377079	1.375666	1.372786
8.25%	1.085989	1.085692	1.085088	1.390916	1.389398	1.386306
8.50%	1.088706	1.088391	1.087748	1.404892	1.403265	1.399952
8.75%	1.091431	1.091096	1.090413	1.419008	1.417267	1.413723
9.00%	1.094162	1.093807	1.093083	1.433266	1.431405	1.427621
9.25%	1.096900	1.096524	1.095758	1.447667	1.445682	1.441648
9.50%	1.099645	1.099248	1.098438	1.462212	1.460098	1.455803
9.75%	1.102397	1.101977	1.101123	1.476904	1.474655	1.470089
10.00%	1.105156	1.104713	1.103813	1.491743	1.489354	1.484506
10.25%	1.107921	1.107455	1.106508	1.506731	1.504196	1.499055
10.50%	1.110694	1.110203	1.109207	1.521870	1.519184	1.513738
10.75%	1.113473	1.112958	1.111912	1.537160	1.534317	1.528556
11.00%	1.116260	1.115719	1.114621	1.552604	1.549598	1.543509
11.25%	1.119053	1.118486	1.117336	1.568203	1.565028	1.558600
11.50%	1.121853	1.121259	1.120055	1.583959	1.580608	1.573829
11.75%	1.124660	1.124039	1.122779	1.599873	1.596341	1.589197
12.00%	1.127475	1.126825	1.125509	1.615947	1.612226	1.604706
12.25%	1.130296	1.129617	1.128243	1.632182	1.628266	1.620357
12.50%	1.133124	1.132416	1.130982	1.648580	1.644463	1.636151
12.75%	1.135960	1.135221	1.133727	1.665143	1.660817	1.652089
13.00%	1.138802	1.138032	1.136476	1.681872	1.677330	1.668173
13.25%	1.141652	1.140850	1.139230	1.698769	1.694005	1.684403



# Conversion Tables

Time	
60 seconds (s) = 1 minute (min)	52 weeks = 1 year
60 minutes = 1 hour (h)	12 months = 1 year
24 hours = 1 day	100 years = 1 century
7 days = 1 week	

Metric System	
Length	Volume
10 millimeters (mm) = 1 centimeter (cm)	1,000 milliliters (mL) = 1 liter (L)
100 centimeters = 1 meter (m)	1,000 cubic centimeters (cm <sup>3</sup> ) = 1 liter
1,000 meters = 1 kilometer (km)	10 milliliters = 1 centiliter (cL)
	10 deciliters (dL) = 1 liter
Area	Mass
100 square millimeters (mm <sup>2</sup> ) = 1 square centimeter (cm <sup>2</sup> )	1,000 milligrams (mg) = 1 gram (g)
10,000 square centimeters = 1 square meter (m <sup>2</sup> )	1,000 grams = 1 kilogram (kg)
10,000 square meters = 1 hectare (ha)	1,000 kilograms = 1 metric ton (t)

Customary System	
Length	Volume
12 inches (in) = 1 foot (ft)	8 fluid ounces (oz) = 1 cup (c)
3 feet = 1 yard (yd)	2 cups = 1 pint (pt)
5,280 feet = 1 mile (mi)	2 pints = 1 quart (qt)
	4 quarts = 1 gallon (gal)
Area	Weight
144 square inches (in <sup>2</sup> ) = 1 square foot (ft <sup>2</sup> )	16 ounces = 1 pound
9 square feet = 1 square yard (yd <sup>2</sup> )	2,000 pounds = 1 ton (t)
4,837 square yards = 1 acre (A)	

# Selected Answers

## Workshop Answers

**Workshop 1 Self-Check** 1. 24,366 2. 436.785  
 3. hundreds and thousandths 4. Standard form: 5,456.68;  
 Word form: five thousand four hundred fifty-six and sixty-eight  
 hundredths; Point form: five four five six point six eight  
 5. Standard form: 56.817; Word form: fifty-six and eight  
 hundred seventeen thousandths; Point form: five six point eight  
 one seven 6. Word form: eight hundred seventy-five and forty-  
 eight one hundredth dollars or eight hundred seventy-five and  $\frac{48}{100}$   
 dollars or eight hundred seventy-five dollars and forty-eight cents  
**Practice** 7. millions 9. Word form: five hundred forty-three  
 thousand, six hundred ninety-eight; Short word form: 543  
 thousand, 698 11. Standard form: 654,321; Word form:  
 six hundred fifty-four thousand, three hundred twenty-one  
 13.  $4,000 + 600 + 70 + 8$

**Workshop 2 Self-Check** 1. 6,000 2. 5,693.3 3. 5,700  
 4. 5,693 5. \$21.28 6. \$967.46 7. \$138.78 8. \$647.56  
**Practice** 9. 16,000,000 11. 15,749,000 13. 15,750,000  
 15.

	Football Game	Number	Nearest Thousand	Nearest Hundred	Nearest Ten
a.	Austin Peavey	18,971	19,000	19,000	18,970
b.	Bowling Green	25,687	26,000	25,700	25,690
c.	Ohio University	20,119	20,000	20,100	20,120
d.	Western Michigan	24,567	25,000	24,600	24,570
e.	Central Michigan	19,424	19,000	19,400	19,420

**Workshop 3 Self-Check** 1. 8,891 2. 7,521 3. 284.4  
 4. 0.06 **Practice** 5. 29 7. 2.65 9. 0.4 11. 0.03  
 13. 1.36, 1.37, 1.39 15. 7.18, 7.38, 7.58 17. 40.004, 40.04,  
 40.4 19. 365.15, 365.490, 365.51 21. a. Science: 513.12,  
 519.03, 532.626, 571.113, 587.41 b. Literature: 11.7, 32.615,  
 34.9, 67.192, 94.79 c. Religion: 15.04, 18.7, 26.311, 46.94,  
 71.21 d. Language: 22.5, 38.9, 48.275, 67.21, 93.047

**Workshop 4 Self-Check** 1. 70.88 2. 178.44 3. 222.86  
 4. 183.76 5. 365.475 6. 1,282.842 7. \$597.36 8. \$579.84  
**Practice** 9. 133.49 11. 871.76 13. 175.364 15. 14.082  
 17. 201.38 19. 22.4009 21. 601.234 23. 649.647  
 25. 1,128.894 27. 191.968 29. 124.03 31. 302.6016  
 33. \$123.96 35. \$289.17

**Workshop 5 Self-Check** 1. 53.61 2. 38.3 3. 610.08  
 4. 68.76 **Practice** 5. 63.30 7. 11.33 9. 39.30  
 11. 4.639 13. \$67.69 15. \$665.90 17. \$264.03  
 19. \$16,681.07 21. 117.5 23. 4.50 25. \$863.15  
 27. a. \$0.06 b. \$0.88 c. \$0.03 d. \$2.00 e. \$0.00  
 f. \$1.89 g. \$0.10 h. \$2.58 i. \$1.00 j. \$0.16

**Workshop 6 Self-Check** 1. 8.151 2. 89.452  
 3. 0.0858 4. 0.0592 5. \$35.275 = \$35.28 6. 714  
 7. 4,186.1 **Practice** 9. 23.52 11. 37.224 13. 34.639  
 15. 0.0592 17. \$437.75 19. \$25.46 21. 57.1  
 23. 4,178.6 25. 7,195.6 27. 34,287.6

**Workshop 7 Self-Check** 1. 6.2 2. 4.29 3. 36  
 4. \$1.36 5. 0.79 6. 1.389 7. 9.8628 **Practice**  
 9. 3.5 11. 1.83 13. 12.002 = 12.00 15. 1.442  
 17. 4.298 19. 84.6265 21. 0.32129 23. 6.365218  
 25. 0.041549

**Workshop 8 Self-Check** 1.  $\frac{3}{4} \times \frac{5}{8} = \frac{3 \times 5}{4 \times 8} = \frac{15}{32}$   
 2.  $\frac{7}{8} \times \frac{3}{8} = \frac{7 \times 3}{8 \times 8} = \frac{21}{64}$  3.  $\frac{2}{3} \times 600 = \frac{2}{3} \times \frac{600}{1} =$   
 $\frac{1,200}{3} = 400$  4.  $\frac{3}{4} \times \frac{5}{9} = \frac{3 \times 5}{4 \times 9} = \frac{3 \times 5}{2 \times 2 \times 3 \times 3} = \frac{5}{12}$

5.  $\frac{2}{15} \times \frac{5}{8} = \frac{2 \times 5}{3 \times 5 \times 2 \times 2 \times 2} = \frac{1}{3 \times 2 \times 2} = \frac{1}{12}$   
 6.  $\frac{5}{6} \times 180 = \frac{5}{6} \times \frac{180}{1} = \frac{5 \times 6 \times 30}{6} = 150$   
 7.  $4\frac{1}{2} \times 8 = \frac{9}{2} \times \frac{8}{1} = \frac{9 \times 2 \times 4}{2} = 36$

8.  $3\frac{3}{5} \times 2\frac{2}{9} = \frac{18}{5} \times \frac{20}{9} = \frac{2 \times 9 \times 5 \times 4}{5 \times 9} = \frac{8}{1} = 8$   
 9.  $4\frac{1}{2} \times 3\frac{1}{3} = \frac{9}{2} \times \frac{10}{3} = \frac{3 \times 3 \times 2 \times 5}{2 \times 3} = 15$

**Practice** 11.  $\frac{21}{40}$  13.  $\frac{27}{50}$  15. 15 17. 440 19.  $1\frac{1}{2}$   
 21.  $\frac{6}{25}$  23.  $27\frac{5}{8}$  25.  $59\frac{3}{8}$  27. 238

**Workshop 9 Self-Check** 1.  $\frac{3}{5}$  2.  $\frac{8}{7}$  3.  $\frac{1}{10}$  4.  $\frac{2}{5}$  5.  $\frac{5}{6}$   
 6.  $\frac{3}{8}$  7.  $\frac{2}{5}$  8. 5 **Practice** 9.  $\frac{4}{3}$  11.  $\frac{16}{3}$  13.  $\frac{10}{1}$  15.  $\frac{1}{15}$   
 17.  $\frac{2}{3}$  19.  $\frac{7}{24}$  21.  $2\frac{5}{8}$  23. 16 25.  $\frac{7}{128}$  27. 4 29.  $7\frac{12}{13}$   
 31. 98 bags 33.  $3\frac{1}{2}$  quarts

**Workshop 10 Self-Check** 1.  $\frac{3}{5}$  or 1 2.  $\frac{23}{18}$  or  $1\frac{5}{18}$   
 3.  $\frac{14}{7}$  or 2 4.  $\frac{12}{9}$  or  $1\frac{1}{3}$  5.  $\frac{9}{8}$  or  $1\frac{1}{8}$  6.  $\frac{11}{6}$  or  $1\frac{5}{6}$  7.  $\frac{53}{30}$  or  $1\frac{23}{30}$   
 8.  $\frac{79}{60}$  or  $1\frac{19}{60}$  **Practice** 9.  $\frac{22}{15}$  or  $1\frac{7}{15}$  11.  $\frac{19}{18}$  or  $1\frac{1}{18}$  13.  $\frac{65}{42}$   
 or  $\frac{123}{42}$  15.  $\frac{65}{44}$  or  $1\frac{21}{44}$  17.  $\frac{59}{63}$  19.  $\frac{193}{120}$  or  $1\frac{73}{120}$  21.  $\frac{16}{15}$  or  $1\frac{1}{15}$   
 23.  $\frac{13}{6}$  or  $2\frac{1}{6}$  25.  $\frac{41}{24}$  or  $1\frac{17}{24}$  27.  $\frac{77}{36}$  or  $2\frac{5}{36}$  29.  $\frac{101}{66}$  or  $1\frac{35}{66}$   
 31.  $\frac{89}{28}$  or  $3\frac{5}{28}$  33. 2 35.  $\frac{9}{10}$  37.  $\frac{59}{60}$

**Workshop 11 Self-Check** 1.  $\frac{1}{2}$  2.  $\frac{2}{3}$  3.  $\frac{11}{17}$  4.  $\frac{2}{29}$   
 5.  $\frac{1}{4}$  6.  $\frac{11}{24}$  7.  $\frac{7}{60}$  8.  $\frac{29}{60}$  9.  $3\frac{3}{7}$  10.  $4\frac{1}{2}$  11.  $7\frac{5}{8}$  12.  $\frac{1}{16}$   
**Practice** 13.  $\frac{1}{3}$  15.  $\frac{11}{17}$  17.  $\frac{5}{24}$  19.  $\frac{5}{24}$  21.  $\frac{31}{63}$  23.  $\frac{13}{30}$   
 25.  $2\frac{5}{12}$  27.  $7\frac{3}{10}$  29.  $\frac{1}{24}$  31.  $\frac{1}{12}$  33.  $\frac{1}{5}$

**Workshop 12 Self-Check** 1.  $\frac{5}{8} < \frac{7}{8}$  2.  $\frac{11}{12} > \frac{7}{12}$   
 3.  $\frac{2}{3} > \frac{1}{3}$  4.  $\frac{49}{50} > \frac{41}{50}$  5.  $\frac{5}{6} < \frac{7}{8}$  6.  $\frac{7}{12} > \frac{5}{9}$  7.  $\frac{3}{7} > \frac{7}{15}$   
 8.  $\frac{45}{47} > \frac{89}{93}$  9.  $\frac{8}{11} < \frac{15}{19}$  10.  $\frac{1}{23} < \frac{2}{45}$  11.  $\frac{5}{13} > \frac{9}{25}$   
 12.  $\frac{147}{347} > \frac{440}{1,039}$  **Practice** 13.  $\frac{4}{5} > \frac{3}{5}$  15.  $\frac{347}{498} > \frac{299}{498}$   
 17.  $\frac{5}{8} > \frac{11}{18}$  19.  $\frac{43}{45} < \frac{22}{23}$  21.  $\frac{14}{19} > \frac{23}{37}$  23.  $\frac{23}{25} > \frac{45}{49}$   
 25.  $\frac{3}{11} < \frac{7}{23}$  27.  $\frac{12}{17} > \frac{26}{37}$  29. Clothing Hut 31. Dow Jones  
 Industrials 33. Texas

**Workshop 13 Self-Check** 1. 0.4286 = 0.429 2. 0.875  
 3.  $0.4 = \frac{4}{10} = \frac{2}{5}$  4.  $7\frac{82}{100} = 7\frac{41}{50}$  5. 0.375 6. 0.09 7. 85%  
 8. 7% 9. 30% 10. 155% **Practice** 11. 0.260  
 13. 0.889 15. 0.56 17.  $\frac{3}{8}$  19.  $\frac{287}{20}$  or  $14\frac{7}{20}$  21. 8.17  
 23. 35% 25. 412.5%

**Workshop 14 Self-Check** 1. 28 2. 30 3. 1.5  
 4. 290 5. \$24.50 discount 6. 57 tons **Practice** 7. 10.8

9. 140.7 11. 100.8 13. 3.8 15. \$3.30 17. \$2.33  
 19. \$12.00 21. \$6.27 23. 243 feet  
**Workshop 15 Self-Check** 1. 16 2. -12 3. -17.5  
 4.  $-1\frac{2}{5}$  5. 4 6. 15 7. 4 8. -13 9. -2.3 10. -30  
 11. -2 12. -7 13. -9 14. 12 **Practice** 15. -11  
 17. -7 19. -30 21. 2 23. -4 25. 7 27.  $214^{\circ}F$

- Workshop 16 Self-Check** 1. 5 2. 5.1 3. 130  
 4. \$41.33 **Practice** 5. 10 7. 80 9. 140 11. 743  
 13. 4.38 15. 3.05 17. \$14.20 19. 6.7 21. 33.9  
 23. 40.04 25. 150 27. \$2.56 29. \$425.40 31. 85  
 33. No

- Workshop 17 Self-Check** 1. 2 h:0 min 2. 3 h:20 min  
 3. 7 h:5 min 4. 8 h:5 min 5. 3 h:45 min 6. 7 h:30 min  
 7. 1 h:45 min 8. 9 h:50 min 9. 8 h:0 min 10. 8 h:15 min  
 11. 8 h:15 min 12. 8 h:50 min **Practice** 13. 7 h:15 min  
 15. 5 h:55 min 17. 8 h:30 min 19. 3 h:53 min 21. 4 h:45 min  
 23. 8 h:27 min 25. 3 h:30 min 27. 4:15 P.M.

- Workshop 18 Self-Check** 1. \$36 2. \$55 3. \$107  
 4. \$111 5. Size 38 or 39 6. Size 42 **Practice** 7. \$126  
 9. \$187 11. \$104 13. \$91 15. \$123 17. \$55  
 19. a. 12.0 lb b. 3.0 lb c. 11.0 lb d. 6.0 lb e. 13.0 lb  
 f. 1.0 lb 21. Size 36 or 37

- Workshop 19 Self-Check** 1. Year I. Look at the bars for the shortest bar. 2. No. 3. Just over 60,000. Look at the height of the bar and then look at the vertical scale.

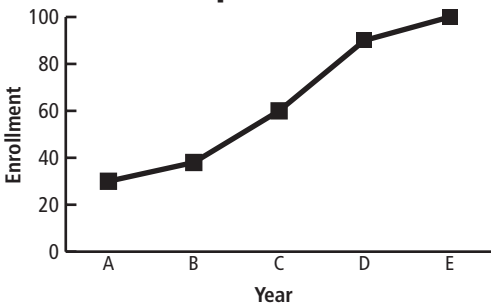
- Practice** 5. Statoil ASA and Prudential 7. service  
 9. manufacturing 11. J 13. H 15. \$100

**Workshop 20 Self-Check**

1. **Metropolitan Statistical Areas**

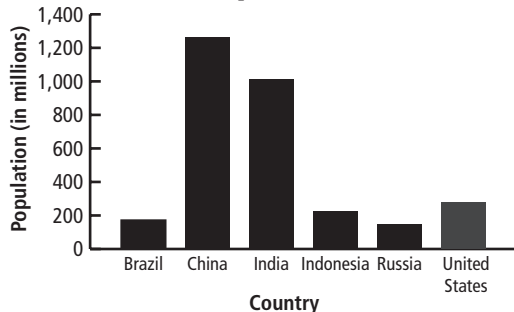


2. **Computer Classes**

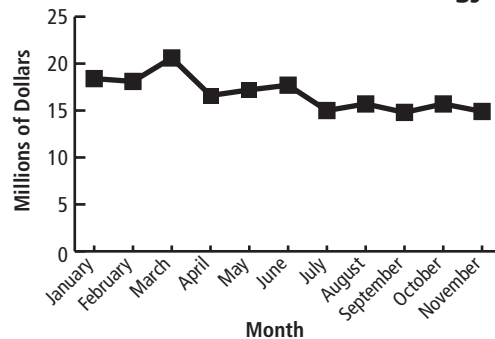


**Practice**

3. **World Population (in millions)**



5. **Trade with Advanced Technology**



- Workshop 21 Self-Check** 1. 108 in 2. 150 ml 3. 8 yd  
 4. 3.5 m **Practice** 5. 27 ft 7. 112 oz 9. 96 oz  
 11. 3,800 m 13. 3,200 g 15. 2.25 gal 17. 3.5 gal 19. 2 kg  
 21. 3.3 L 23. 72,100 g 25. 0.723 kg 27. 180 mm 29. 40 in  
 31. 11 pt 33. 10 qt 35. 20 qt 37. 8 c 39. 240 in  
 41. 3,900 43. 2.13 L 45. a. 36 ft b. 36 ft, 48 ft, 84 ft  
 c. 21 ft, 18 ft 8 in, 39 ft 8 in d. 22 ft 6 in, 15 ft 4 in, 37 ft 10 in  
 e. 22 ft 8 in, 26 ft 4 in, 49 ft f. 35 ft 4 in, 25 ft 6 in, 60 ft 10 in  
 g. 16 ft 10 in, 15 ft 6 in, 32 ft 4 in; Total: 381 ft 8 in

- Workshop 22 Self-Check** 1. 280 cm 2. 1.5 dm  
 3. 2.61 m 4. 3.26 km 5. 2.5 m 6. 0.098 hm  
 7. 3,870 mL 8. 2,000 g **Practice**

	Kilo	Hecto	Deka	Base	Deci	Centi	Milli
9.	9	90	900	9,000	90,000	900,000	9,000,000
11.	0.02	0.20	20	200	2,000	20,000	200,000
13.	0.033	0.33	3.3	33	330	3,300	33,000

15. 200 17. 20 19. 4 21. 0.25 23. 500 25. 10  
 27. 38,000 29. 0.736 31. 5 33. 8 35. 32,000  
 37. 0.0321 39. 3,170 g 41. 76,200 mm, 0.304 m 43. 2.27 kg

- Workshop 23 Self-Check** 1. 188.5 2. 50,111.55  
 3. 596.66 4. 60,078.42 **Practice** 5. 33,864

7. \$21,435.86 9. 144,434.10 11. \$2,206.28 13. \$5.43

- Workshop 24 Self-Check** 1.  $40 - 30 = 10$ ; 16,495

2.  $42 \div 7 = 6$ ; 5,894 3.  $5 \times 5 = 25$ ;  $23\frac{11}{12}$  4.  $64 \times 10 = 640$ ; 628.2353 **Practice** 5.  $6,000 + 2,000 = 8,000$ ; 7,789  
 7.  $16 - 14 = 2$ ; 2.14 9.  $9 \times 8 = 72$ ; 73.9728 11.  $49 \div 7 = 7$ ; 7.135 13.  $3 \times 2 = 6$ ;  $4\frac{1}{8}$  15.  $\frac{1}{4} \times 12 = 3$ ;  $3\frac{1}{8}$  17.  $\frac{7}{10} \times \$50 = \$35$ ; \$34.97 19.  $\frac{1}{2} \times 160 = 80$ ; \$83.20 21.  $800 \div 40 = 20$ ; \$18.76 23.  $\frac{1}{3} \times 36 = 12$ ; \$11.86

- Workshop 25 Self-Check** 1. 900; 1,100 2. 15,000; 1,631 3. 6,000; 7,338 4. 800; 871.75 5.  $600 + 200 = 800$ ; 1,195 6.  $700 + 200 = 900$ ; 1,006 7.  $1,700 + 200 = 1,900$ ; 1,900 8.  $2,200 + 300 = 2,500$ ; 2,582.61 **Practice**

9. 15,000; 16,784 11. 8,000; 8,946 13. 1,500; 1,505

15. \$102; \$104.26 17. 21,000; 21,647

- Workshop 26 Self-Check** 1.  $640 \div 80 = 8$ ; 8.07

2.  $9,000 \div 300 = 30$ ; 27.3 3.  $50 \div 5 = 10$ ; 9.33 4.  $300 \div 6 = 5$ ; 54.99 5.  $\frac{1}{4} \times 12 = 3$ ;  $3\frac{1}{32}$  6.  $\frac{1}{2} \times 30 = 15$ ;  $19\frac{1}{8}$   
 7.  $\frac{1}{3} \times \$900 = \$300$ ; \$324.10 8.  $\frac{1}{4} \times \$800 = \$200$ ; \$221.40

- Practice** 9. 1,000; 1,103 11. 1,200; 1,219 13. 30; 28  
 15. 100; 108.23 17.  $3; 2\frac{5}{6}$  19. \$215; \$215 21. 14,000; 14,095.42 23.  $7; 6\frac{5}{6}$  25. 5,000; 5,500 27. \$3,000; \$3,025  
 29. \$500; \$484.62 31. \$15,300; \$17,680 33. \$18; \$17.88

- Workshop 27 Self-Check** 1.  $600 \times 4 = 2,400$ ; 2,332  
 2.  $\$30 \times 4 = \$120$ ; \$119.09 3.  $(3 \times \$2) + \$1 = \$6 + \$1 = \$7$ ; \$6.34 **Practice** 5.  $500 \times 4 = 2,000$ ; 2,063 7.  $\$.40 \times 4 = \$1.60$ ; \$161.24 9.  $(8 \times 4) + 4 = 32 + 4 = 36$ ; 35.87

11.  $(2 \times 4) + 9 = 8 + 9 = 17$ ; 18.28 13.  $\$7 \times 5 = \$35$ ; \$35.09 15.  $(\$26 \times 3) + (\$40 \times 2) = \$78 + \$80 = \$158$ ; \$157.60 17.  $(\$18 \times 4) + \$40 = \$72 + \$40 = \$112$ ; \$110.05 19.  $\$50,000 + (\$90,000 \times 3) = \$50,000 + \$270,000 = \$320,000$ ; \$323,610 21. \$125; \$122.80

**Workshop 28 Self-Check** 1. 1,375,000 or One million three hundred seventy-five thousand 2. 386,420,000 or Three hundred eighty-six million four hundred twenty thousand 3. 712.3 or Seven hundred twelve and three tenths 4. 0.0000047945 or Forty-seven thousand nine hundred forty-five billionths 5.  $9.3 \times 10^7$  6.  $3.86 \times 10^{-8}$  7.  $7.000216 \times 10^6$  8.  $4.021 \times 10^{-1}$  **Practice** 9. 739,100 or Seven hundred thirty-nine thousand one hundred 11. 0.000871 or Eight hundred seventy-one millionths 13. 292,651,000,000 or Two hundred ninety-two billion six hundred fifty-one million 15.  $1.262038 \times 10^7$  17.  $2.86 \times 10^{-5}$  19.  $19.475 \times 10^6$  21. 2,600,000,000 or Two billion six hundred million 23. 10,400,000 or Ten million four hundred thousand 25. 0.000096 or Ninety-six millionths 27.  $\$2.0 \times 10^6$

**Workshop 29 Self-Check** 1. \$4,200 **Practice** 3. \$139.88 5. \$11,984 7. \$868.50 9. Approximately 1,495 rotations 11. 224 miles

**Workshop 30 Self-Check** 1. Problem cannot be solved. Need number of payments. **Practice** 3. Cannot be solved. Need relationship between pints and pounds. 5. \$74 7. Cannot be solved. Need weight of watermelons. 9. 5' 11" 11. Cannot be solved. Need the cost of the tennis balls. 13. 19 15. One mile per hour

**Workshop 31 Self-Check** 1.  $\$50.00 - (\$7.95 + \$15.20 + \$12.47) = \$14.38$  2. 17 3. \$231.00 4. \$2.68 **Practice** 5. \$29.60 7. \$310.00 9. 28.5 degrees C 11. 223 13. \$2,250 15. \$4.55

**Workshop 32 Self-Check** 1. No, he used 93 instead of \$0.93. Answer is \$9.30. 2. About \$18.00;  $36'' = 3$  ft and  $3 \times \$6 = \$18$  **Practice** 3. Yes; No error 5. No; Decimal point; estimate: \$70 7. Yes; No error 9. No; Used 10 sq ft instead of 1 sq yd; estimate: \$15 11. about \$500 13. about \$1,600 15. about \$200 17. about \$3 19. about 25

**Workshop 33 Self-Check** 1. 7 bicycles; 4 unicycles 2. 9 high school; 5 college **Practice** 3. 6 bicycles; 3 tricycles 5. 20 nickels; 20 quarters 7. 25 9. 12 11. 4 pennies; 4 dimes; 1 quarter

**Workshop 34 Self-Check** 1. 81, 243, 729 2. 16, 22, 29 **Practice** 3. 34, 40, 46 5. 18, 15, 12 7. 25, 36, 49 9. 1,093, 3,280, 9,841 11. 8 dimes; 12 quarters 13. 33 15. 2:30 P.M. 17.  $4 \times 4$ ;  $6 \times 3$  19. 11

**Workshop 35 Self-Check** 1. 7, 8, and 9 **Practice** 3. 15 letters and 6 postcards. 5. All sums are 12. 7. 2 9. Green van: 10 years old; white van: 8 years old; blue van: 4 years old. 11. Many different ways. Here are two:  $888+8+8+8+8+8+8+8+8+8+8+8+8+8+8+8$  or  $888+88+8+8+8$ . 13. 378 bicycles and 108 tricycles.

**Workshop 36 Self-Check** 1. a. Add 4, divide by 6:  $m = 5$  b. Subtract 12, multiply by 3:  $n = 9$  c. Add 3, multiply by 5, divide by 2:  $p = 30$  **Practice** 3.  $s = 15$  5.  $u = 9$  7.  $w = 8$  9. 8 11. 150 13. 3:00 P.M. 15. 15

**Workshop 37 Self-Check** 1. 29 days **Practice** 3. 5 cartons 5. \$15,000 7. 56 dozen 9. 62 11. 6 couples 13. 128 games if the champion is undefeated; 129 games if the champion has one loss.

**Workshop 38 Self-Check** 1. 11 **Practice** 3. Cork: \$0.05; bottle: \$1.05 5. 54 yards 7. \$3,695.33 9. Holstein 11. 7, 9, 11 13.  $B = 3A - 2$ ; 118 15. Harry = 197; Jerry = 210; Darrel = 192

**Workshop 39 Self-Check** 1. Width = 7 feet; Length = 14 feet; Area = 98 square feet **Practice** 3.  $g = 8$ ,  $f = 1$  5.  $p = 4$ ,  $q = 3$  7.  $v = 53$ ,  $w = 19$  9. 32 copies of the *New York Times* and 27 copies of the *Washington Post* 11. Forty-two \$21,500 model and thirty-five \$28,500 model in the first quarter; Twenty-one \$21,500 model and seventy \$28,500 model in the second quarter.

**Workshop 40 Self-Check** 1.  $3'' + \frac{1}{4}'' + \frac{1}{4}'' + 3'' + \frac{1}{4}'' = 6\frac{3}{4}''$  2. (18 in + 7 in) - 10 in **Practice** 3. 2 blocks west and 8 blocks south 5. 20 ft 7. 16 feet; 19 feet; 25 feet

9. 28 minutes 11. 3.8 cm 13. Cedric or Clare in Canton or Cincinnati; Connie—Cleveland; Charles—Toledo; Carol—Columbus **Workshop 41 Self-Check** 1. 3 **Practice** 3. 12 5. none 7. a. 182 b. 198

**Workshop 42 Self-Check** 1.  $42,390 \div 5,280 = 8.028$  miles **Practice** 3.  $25^2 = 625$  5. a. 15 b. 99

7. a.  $60 \text{ mph} \times 4 \text{ sec} \times \left(\frac{1 \text{ hr}}{3,600 \text{ sec}}\right) \times \left(\frac{5,280 \text{ ft}}{1 \text{ mile}}\right) = 352 \text{ feet}$   
b.  $60 \text{ mph} \times 50 \text{ sec} \times \left(\frac{1 \text{ hr}}{3,600 \text{ sec}}\right) \times \left(\frac{5,280 \text{ ft}}{1 \text{ mile}}\right) = 4,400 \text{ feet}$

9. Borrow one horse from neighbor, then  $18 \times \frac{1}{2} = 9$  for Rick,  $18 \times \frac{1}{3} = 6$  for Mike, and  $18 \times \frac{1}{9} = 2$  for Peter, and then return horse to neighbor. 11. 53

## Chapter 1 Gross Income

**Section 1-1** 3. \$288.00 5. \$486.00 7. \$452.090625 = \$452.09 9. \$195.00 11. \$812.50 13. \$435.20

15. \$657.00 17. \$85.00 19. 0.5 21.  $\$136.125 = \$136.13$  23. \$471.25 25. 140 27. 100 29. 14,400 31. 1,000

**Section 1-2** 3. a. \$240 b. \$72 c. \$312 5. a. \$272.00 b. \$40.80 c. \$312.80 7. a. \$680 b. \$442 c. \$1,122

9. \$392.20; \$127.20; \$519.40 11.  $\$280 + \$96 = \$376$  13. \$67.26 15. \$20.41 17. \$88.20 19. \$67.50

**Section 1-3** 3.  $3\frac{3}{4} + 4 = 7\frac{3}{4}$  5.  $4\frac{1}{4} + 3\frac{1}{2} = 7\frac{3}{4}$  7.  $4\frac{3}{4} + 3\frac{3}{4} = 8\frac{1}{2}$  9. \$336.00 11. a. 8 b. 8 c. 8 d. 8 e.  $7\frac{3}{4}$  f.  $39\frac{3}{4}$ ; total pay: \$298.13 13.  $\frac{7}{8}$  15.  $\frac{23}{24}$  17. 7:45 19. 40,000 21. 68,000 23. 300

**Section 1-4** 3. \$720.00 5. \$516.75 7. \$60.30 9. \$181.16 11. \$20.47 13. \$251.52 15. \$119.60 17. \$231.00 19. 117 21. 9.68 23. 334,146.5

**Section 1-5** 5. \$432.69 7. Annual = \$42,120; Semimonthly = \$1,755 9. \$4,866.67; \$1,123.08 11. \$1,332.50 13. 285.80 15. 13.01 17. 72

**Section 1-6** 5. \$285.00 7. \$362.00 9. \$117.99 11. \$690.48 13. a. \$2,240.00 b. \$2,240.00 15. a. \$2,867.50 b. \$3,140.00 17. a. \$2,475.00 b. \$2,475.00 19. \$274.69 21. \$790 is greater 23. 5.50

25. 9.25 27. \$365.50 29. \$331.20 31. 123.1 33. 0.6

**Section 1-7** 3. \$482 5. \$243.63 7. \$142.50 9. \$1,748.75 11. \$1,034.31 13. 0.055 15. 0.15 17. \$319.20

**Study Guide and Assessment** 1. True 3. True 5. False 7. False 9. False 11. False **Section 1-1** 13.  $40 \times \$9.45 = \$378$  15.  $17.50 \times \$9.45 = \$165.38$  17. \$262 19. \$250.58 **Section 1-2** 21.  $\$9.17 \times 40 = \$366.80$  straight-time pay;  $(1.5 \times \$9.17) \times 7 = \$96.29$  overtime pay;  $\$366.80 + \$96.29 = \$463.09$  23. \$414.10 25. \$481.00

**Section 1-3**

	Date	In	Out	In	Out	Total
27.	9/1	6:45 A.M.	11:30 A.M.	12:00 P.M.	3:45 P.M.	8.50
29.	9/3	6:56 A.M.	11:45 A.M.	12:30 P.M.	4:00 P.M.	8.25
31.	9/5	7:10 A.M.	11:30 A.M.	12:30 P.M.	4:20 P.M.	8.25

**Section 1-4** 33.  $\$125 \times 11 = \$1,375$ ;  $\$18 \times 9 = \$162$ ;  
 $\$1,375 + \$162 = \$1,537$  35. \$414.80 **Section 1-5**  
 37. 156 39. 96 41. \$703.37 43. \$2,696.25  
**Section 1-6** 45. \$304 47. \$1,224.86 49. \$246.35;  
 $\$246.35$  51. \$191.25; \$1,500.00 **Section 1-7**  
 53.  $\$5,000 \times 0.05 = \$250$ ;  $\$15,000 \times 0.065 = \$975$ ;  $\$3,458$   
 $\times 0.07 = \$242.06$ ;  $\$250 + \$975 + \$242.06 = \$1,467.06$   
 55. \$925 57. \$9.89

**Chapter 2 Net Income**

**Section 2-1** 9. \$13 11. \$14 13. \$11 15. \$4  
 17. a. \$61.54 b. \$730.48 c. \$107.52 19. thousands  
 21. hundreds 23. ones 25. \$118.56 27. \$1.55  
 29. \$5,934.59 31. \$801.69

**Section 2-2** 5. \$496 7. \$11,000; \$385 9. \$8,000  
 personal exemptions; \$2,233.60 tax withheld 11. a. \$4,000  
 b. \$707.50 13. \$862.40 15. \$3,380 FIT + \$760 state =  
 \$4,140 17. 26.98 19. 173.8 21. 6.25

**Section 2-3** 3. \$1,237.50 5. \$92.27 7. 241.143  
 9. 20.49 11. 16 13.  $365 \times 4 = 1,460$ ;  $(365 \times 4) + 1 =$   
 1,461 for the leap year

**Section 2-4** 3. a. \$7.75 b. \$1.81 c. \$9.56 5. a. \$14.94  
 b. \$3.49 c. \$18.43 7. a. \$156.30 b. \$36.55 c. \$192.85  
 9. \$117.39; \$274.5; \$144.84 11. Fed: \$28.00; S.S.: \$34.10;  
 Med: \$7.98; Total: \$70.08 13. 48.33 15. 448.63 17. 620  
 19. 8,200 21. 623,200

**Section 2-5** 5. \$158.33 7. \$159.83 9. 1.12 11. 0.02  
 13. 727.16

**Section 2-6** 3. See table below. 5. See table below.  
 7. See table below. 9. 61.732 11. 399.25 13. -2.21  
 15. \$100.45 17. \$5.31 19. \$129.31 21. \$36.06

**Study Guide and Assessment** 1. False 3. False  
 5. True 7. False 9. True **Section 2-1** 11. \$35 13. \$10  
**Section 2-2** 15. \$761.54 17. \$41.54 **Section 2-3**  
 19. \$25.10 21. \$21.44 **Section 2-4** 23. a. \$394.90  
 b. \$92.36 25. a. \$52.27 b. \$12.23 **Section 2-5**  
 27. \$70.83 29. \$24.81 **Section 2-6** 31. See table below.

**Section 2-6** 3.

Dept	Employee	Check Number	Gross Pay	Net Pay			
23	Terence Hall	463	\$598.00	\$429.82			
Tax Deductions				Other Deductions			
FIT	FICA	Medicare	State	Local	Medical	Union Dues	Others
66.00	37.08	8.67	11.96	8.97	15.50	14.00	6.00

**Section 2-6** 5.

Dept	Employee	Check Number	Gross Pay	Net Pay			
SPDI	Rhonda Dakar	1574	\$425.00	\$308.61			
Tax Deductions				Other Deductions			
FIT	FICA	Medicare	State	Local	Medical	Union Dues	Others
21.00	26.35	6.16	8.50	6.38	18.00	10.00	20.00

**Section 2-6** 7.

Dept	Employee	Check Number	Gross Pay	Net Pay			
PAYR	Lynn Golding	355-5887-01	\$720.00	\$560.52			
Tax Deductions				Other Deductions			
FIT	FICA	Medicare	State	Local	Medical	Union Dues	Others
20.00	44.64	10.44	21.60	10.80	35.00	17.00	0.00

**Study Guide and Assessment**  
**Section 2-6** 31.

General Check Information							
Dept.	Employee	Check #	Week Ending	Gross Pay	Net Pay		
23	Chapman, D.	432	3/5/--	\$640.00	\$485.64		
Tax and Personal Deductions							
FIT	FICA	Medicare	State	Local	Medical	Union Dues	Others
73.00	39.68	9.28	12.80	9.60	10.00	—	—



**Alternative Assessment 33.** Gross Pay – Total Deductions = Net Pay **35.** Filing status, allowances, any other deductions, such as state or medical

### Chapter 3 Recordkeeping

- Section 3-1** 5. a. \$3,440.00 b. \$688.00  
 7. a. \$8,802.34 b. \$1,760.47 9. a. \$545.45 b. 109.09  
 11. \$131.23 13. \$675.00 15. No; do not know their monthly net income. 17. \$69.29 19. \$175.3  
**Section 3-2** 5. \$751.50 7. \$1,742 9. \$1,796.67  
 11. Rent, life insurance, car insurance, car registration (i.e., fixed expenses, annual expenses) 13. \$1,008.75 15. \$226.79  
 17. No 19. \$241 21. \$25.74 23. \$2,014.61 25. \$60.25 27. \$6.44  
**Section 3-3** 5. Food, telephone, water, gasoline, pocket money 7. \$100.00; More; \$16.70 9. Less; \$12.86 11. No  
 13. \$1,796.66 budgeted; \$1,740.09 expenses; \$56.57 less  
 15. \$174.85 17. \$2,231.61 19. \$3.64 21. \$3.97  
 23. \$129.84

**Study Guide and Assessment** 1. True 3. True  
 5. True 7. False 9. False **Section 3-1** 11.  $\$2,334.09 + \$2,567.33 + \$3,451.96 + \$1,988.78 = \$10,342.16$ ;  $\$10,342.16 \div 4 = \$2,585.54$  13. \$110.55 **Section 3-2** 15. \$847.01  
 17. \$173.90 19. Yes **Section 3-3** 21.  $\$125.00 + \$50.00 + \$45.00 + \$60.00 = \$280.00$  budgeted for personal expenses. Actual personal expenses:  $\$73.89 + \$50.00 + \$39.85 + \$75.12 = \$238.86$ .  $\$280.00 - \$238.86 = \$41.14$ . They spent less than the amount budgeted by \$41.14. 23. Yes; car registration.  
 25. \$5,278.71 **Alternative Assessment** 27. Answers will vary. 29. Answers will vary.

### Chapter 4 Checking Accounts

- Section 4-1** 5. a. \$41.80 b. \$41.80 7. a. \$178.20  
 b. \$168.20 9. a. \$1,275.55 b. \$1,240.55 11. \$151.45  
 13. \$1,238.03 15. \$1,556.46 17. \$659.40 19. \$653.32  
**Section 4-2** 9. Forty and  $\frac{40}{100}$  dollars 11. Sixty-three and  $\frac{74}{100}$  dollars 13. Thirty-four and  $\frac{06}{100}$  dollars 15. One thousand nine hundred seventeen and  $\frac{00}{100}$  dollars 17. Two hundred one and  $\frac{09}{100}$  dollars 19. Five thousand three hundred twenty-seven and  $\frac{17}{100}$  dollars 21. No, two hundred forty-seven and  $\frac{25}{100}$  dollars  
 23. No, should be written ninety-eight and  $\frac{72}{100}$  dollars  
 25. \$35.15 27. Nineteen and  $\frac{25}{100}$  dollars 29. Four hundred thirty-five and  $\frac{00}{100}$  dollars 31. Five thousand two hundred seventy-four and  $\frac{19}{100}$  dollars  
**Section 4-3** 5. 401.43 7. 366.72 9. \$269.30  
 11. a. 103.42 b. 317.22 c. 300.28 d. 225.03  
 13. \$680.35 15. \$305.28 17. \$2,863.29 19. \$366.63  
 21. \$253.38 23. \$2,792.20  
**Section 4-4** 5. \$47.66 7. \$6,287.68 9. \$684.66  
 11. \$1,066.70 13. \$47,082.74 15. \$600.82 17. \$1,362.97  
**Section 4-5** 5. a. \$496.05 b. \$496.05 7. a. \$4,604.53  
 b. \$4,604.53 9. \$411.05 11. \$93.78 13. \$243.77  
**Section 4-6** 5. \$45.45 7. a. \$1,593.97 b. \$3,640.46  
 c. \$1,831.19 d. \$800.92 9. \$15,359.29 11. \$884.07  
 13. \$89,650.10 15. \$281.31  
**Study Guide and Assessment** 1. reconcile 3. balance  
 5. bank statement 7. check register 9. online banking  
**Section 4-1** 11.  $\$256.00 + \$194.55 - \$39.30 = \$411.25$

13. \$1,121.91 **Section 4-2** 15. One hundred twenty-three and  $\frac{45}{100}$  dollars 17. Fifty-four and  $\frac{33}{100}$  dollars 19. Three hundred eighty-seven and  $\frac{21}{100}$  dollars **Section 4-3**  
 21. \$472.25 23. \$314.87 **Section 4-4** 25. \$176.93  
 27. \$1,344.62 **Section 4-5** 29. \$172.21 31. \$172.21  
**Section 4-6** 33. \$23.45

### Chapter 5 Savings Accounts

- Section 5-1** 5. \$77.18 7. \$902.90 9. a. \$129.65  
 b. \$129.65 11. a. \$296.16 b. \$146.16 13. \$500.03  
 15. \$256.48 17. \$1,609.50 19. \$58.78 21. \$697.97  
 23. \$657.17 25. \$612.28  
**Section 5-2** 7. One hundred fifty and  $\frac{00}{100}$  dollars 9. Sixty-eight and  $\frac{74}{100}$  dollars 11. One hundred thirty-seven and  $\frac{51}{100}$  dollars 13. \$932.25 15. \$7,585.00 17. a. 13-122-541  
 b. \$2,460.00 c. Two thousand four hundred sixty and  $\frac{00}{100}$  dollars 19. a. 17594179 b. \$831.95 c. Eight hundred thirty-one and  $\frac{95}{100}$  dollars 21. Ninety-four and  $\frac{78}{100}$  23. One hundred sixty-two and  $\frac{05}{100}$  25. \$39.41 27. \$6,340.22  
**Section 5-3** 5. \$411.95 7. \$7,442.26 9. \$1,947.25  
 11. a. \$236.75 b. \$572.35 c. \$574.63 d. \$577.24  
 e. \$579.86 f. \$15.59 13. \$1,267.52 15. \$1,047.62  
 17. \$1,874.56 19. \$29,569.33  
**Section 5-4** 5. a. \$43.20 b. \$10.80 7. a. \$13.08  
 b. \$6.54 9. a. \$256.45 b. \$5.62 11. \$9.50 13. \$20.00  
 15. 0.5 17. 0.25 19. 6.25 21. 0.055 23. 0.095 25. 0.10625  
**Section 5-5** 3. a. \$13.70 b. \$927.20 5. a. \$2,413.10  
 b. \$54.29 c. \$2,467.39 7. a. \$2,637.10 b. \$30,358.10  
 c. \$2,887.97 d. \$33,246.07 9. a. \$836.54 b. \$36.54  
 11. \$4,957.69 13. a. \$3,799.36 b. \$179.36 15. 0.0525  
 17. 0.0575 19. \$49.40 21. 0.30 23. 0.63  
**Section 5-6** 5. a. \$678.98 b. \$38.98 7. a. \$8,273.43  
 b. \$2,042.03 9. \$320.94 11. \$12,092.02 13. \$849.09;  
 \$49.09 15. 0.02 17. 0.005 19. 0.0425  
**Section 5-7** 5. a. \$904.21 b. \$4.21 7. a. \$3,851.83  
 b. \$51.83 9. \$38.57 11. \$79.04 13. \$2,303.05  
 15. \$9,012.15 17. \$1,442.63 19. \$1,431.00  
 21. \$41,688.99 23. \$390.17 25. \$327.83  
**Section 5-8** 5. a. 1.50 b. 8 c. 8.43284  
 d. \$42,164.20 e. 1.0150 f. \$42,796.66 7. a. 4.00  
 b. 10 c. 12.00611 d. \$24,012.22 e. 1.0400  
 f. \$24,972.71 9. a. 2.00 b. 40 c. 60.40198  
 d. \$31,711.04 e. 1.0200 f. \$32,345.26 11. \$10,354.72  
 13. \$135,352.95 15. \$971.09 17. \$11,616.80  
 19. \$15,241.71 21. \$9,641.82 23. \$324,170.24  
**Study Guide and Assessment** 1–13. Answers will vary. **Section 5-1** 15. a. \$208.68 b. \$173.18  
 17. a. \$213.28 b. \$98.28 19. a. \$187.89 b. \$112.89  
**Section 5-2** 21. Twenty-one and  $\frac{44}{100}$  dollars 23. Seventy-six and  $\frac{60}{100}$  dollars 25. a. 045-8996 b. \$985.40  
 c. Nine hundred eighty-five and  $\frac{40}{100}$  dollars **Section 5-3**  
 27. \$2,086.43 29.  $\$21,395.65 + \$14.39 + (\$498.88 + \$98.10) - \$8,498.23 = \$13,508.79$  **Section 5-4**  
 31. \$22.25 33. a.  $\$1,250 \times 0.0425 \times \frac{20}{365} = \$2.9109 = \$2.91$  b.  $(\$1,250 + \$450) \times 0.0425 \times \frac{10}{365} = \$1.9789 = \$1.98$  c.  $(\$1,700 - \$300) \times 0.0425 \times \frac{8}{365} = \$1.3030 = \$1.30$ ; Total Interest for the Month = \$6.19; Account at end of month: \$1,406.19 **Section 5-5** 35. a. \$18.00  
 b. \$1,218.00 c. \$18.27 d. \$1,236.27 37. a. \$7.84



- b. \$972.84 c. \$7.90 d. \$980.74 **Section 5-6**  
**39. a.** \$1,273.08 **b.** \$73.08 **41. a.** \$1,358.51 (or rounded \$1,358.52) **b.** \$128.51 (or rounded \$128.52)  
**Section 5-7 43. a.** \$8,551.34 **b.** \$51.34 **45.** Find the number of days from June 30 to August 1. Use the Elapsed Time table on page 796. August 1 is day 213. June 30 is day 181.  $213 - 181 = 32$  days. Find the amount of \$1.00 for 32 days. It is  $1.00483$ .  $\$1,500 \times 1.00483 = \$1,507.25$ ;  $\$1,507.25 - \$1,500 = \$7.25$  **Section 5-8 47. a.** 1% **b.** 8 **c.** \$8.28567 **d.** \$24,857.01 **49. a.** 2% **b.** 12 **c.** \$13.41209 **d.** \$33,530.22 (or rounded \$33,530.23)

## Chapter 6 Cash Purchases

- Section 6-1 3.** \$2.44 **5.** \$1.09 **7.** \$157.61 **9.** \$90.34; \$4.52 **11.** \$5.75 **13.** \$2.39 **15.** \$108 **17.** 4,000  
**19.** 440 **21.** 90 **23.** \$279.54 **25.** 37.6 **27.** 131.0

- Section 6-2 3.** \$1.77 **5. a.** \$0.87 **b.** \$22.62  
**7.** \$64.14 **9.** \$77.88 **11.** \$121.02 **13.** \$33.02  
**15.** \$22.48; \$413.48 **17.** 142.6152 **19.** 500.81  
**21.** 351.75 **23.** 943.584

- Section 6-3 3.** \$0.08 **5.** \$0.66 **7.** \$0.12 **9.** \$1.50  
**11.** \$84.79 **13.** \$0.28 **15.** 2.51 **17.** 3.58 **19.** 20  
**21.** 21.8 **23.** 2.3 **25.** 87.16

- Section 6-4 3. a.** \$0.0169 or 1.7¢ **b.** \$0.004 or 0.4¢  
**c.** 300 for \$1.27 **5.** 946 mL can is better buy. She must consider if the stain will go bad before it is all used up.  
**7.** 66-ounce jar **9.** Four 4-packs for \$7.95 **11.** 2-pack of  $5\frac{3}{4}$  oz **13.** 0.05 **15.** 0.01 **17.** \$0.2349

- Section 6-5 5.** \$3.45 **7.** \$6.89 **9.** \$4.19 **11.** \$4.09  
**13.** \$4.29 **15.** \$79.99 **17.** \$100.61 **19.** \$8.65

- Section 6-6 5.** \$70.00 **7.** \$20.45 **9.** \$15.00 **11.** \$9.25  
**13.** \$15.00 **15.** \$104.99 **17.** \$6.66/ream; \$3.33 per ream  
**19.** \$600.05 **21.** \$69.53 **23.** 303.19 **25.** 0.9699  
**27.** \$36.00 **29.** \$2.13

- Section 6-7 5.** \$20.99 **7. a.** 80% **b.** \$18.39  
**9.** \$112.49 **11.** \$49.99 **13.**  $(\$44.00 - \$14.95) \div \$44.00 = 0.66 = 66\%$ ;  $(\$152 - \$76) \div \$152 = 0.50 = 50\%$   
**15.** \$18.70 **17.** 25.76 **19.** 10.679

- Study Guide and Assessment 1.** markdown  
**3.** markdown rate **5.** unit pricing **7.** rebate **9.** coupons

**Section 6-1 11.** \$32.72 **13.** \$0.93 **Section 6-2**

- 15. a.** \$1.27 **b.** \$20.77 **17.** \$63.88 **Section 6-3**

- 19.**  $\frac{\$1.99}{32} = \$0.062187 = \$0.062 = 6.2\text{¢}$  per ounce

- 21.** \$6.25 per L **Section 6-4 23.** 100 envelopes:  $\$2.19 \div 100 = \$0.0219 = 2\text{¢}$  per envelope; 150 envelopes:  $\$2.59 \div 150 = \$0.0172 = 1.7\text{¢}$  per envelope; 200 envelopes:  $\$2.99 \div 200 = \$0.0149 = 1.4\text{¢}$  per envelope; The 200 envelopes per box is the best buy. **25.** small size **Section 6-5**

- 27.**  $\$19.99 - \$2.50 = \$17.49$  **29.** \$14.72 **Section 6-6**

- 31.**  $\$899 \times 35\% = \$314.65$  **33.** \$38.24 **Section 6-7**

- 35. a.** \$87.44 **b.** \$262.31 **37. a.** \$43.21 **b.** \$80.24

- 39.** \$21.76; \$41.75; \$6.58 **41.** The 10-oz size is the best buy.

**Cumulative Test Prep 1. B 3. B 5. B 7. D**

- 9.** \$50.00 **11.** \$1,046.14 **13.** \$574.68 **15.** 8-oz = \$0.411; 12-oz = \$0.324 **17.** They may wish to put money in the bank to collect interest until the tax money is due. **19.** A higher interest rate can give you considerably more interest because of the compounding so it is important to get the highest rate. The interest periods are also important—the more times your money compounds the more interest you get.

## Chapter 7

### Charge Accounts and Credit Cards

- Section 7-1 5.** \$649.00 **7.** \$337.65 **9.** \$416.34

- 11.** \$323.72 **13.** \$796.35 **15. a.** payments & credits: \$109.90 **b.** new purchases: \$188.73 **c.** new balance: \$369.04  
**17.** \$405.04 **19.** \$309.30

- Section 7-2 5. a.** \$400.00 **b.** \$6.00 **c.** \$486.00

- 7. a.** \$275.00 **b.** \$4.13 **c.** \$369.13 **9. a.** \$380.00

- b.** \$5.70 **c.** \$608.20 **11. a.** \$372.87 **b.** \$5.59

- c.** \$526.40 **13.** \$1,197.28 **15.** \$817.72 **17.** unpaid balance: \$374.29; finance charge: \$7.49; new balance: \$461.09  
**19.** \$497.58 **21.** \$410.93 **23.** \$369.10 **25.** 4.80

- Section 7-3 9. a.** 19 **b.** \$7,600 **c.** 1 **d.** \$300 **e.** 11

- f.** \$3,300 **g.** 31 **h.** \$11,200 **i.** average daily balance: \$361.29 **11. a.** average daily balance: \$82.73 **b.** finance charge: \$1.65 **c.** new balance: \$152.95 **13.** 2,400  
**15.** 825 **17.** 120 **19.** 72

- Section 7-4 11. a.** 12 days **b.** \$7,200 **13. a.** \$740

- b.** 6 days **c.** \$4,440 **15. a.** \$620 **b.** 10 days **c.** \$6,200

- 17. a.** \$19,200 **b.** 30 days **c.** \$640.00 **19.** 1,015

- 21.** 1,743.13 **23.** 42.90 **25.** 49.80

- Study Guide and Assessment 1.** average-daily-balance method **3.** credit card **5.** finance charge **Section 7-1**

- 7.** \$1,934.16 **9.** \$863.48 **Section 7-2 11.**  $\$75.06 \times 2\% =$

- $\$1.50$ ;  $\$75.06 + \$1.50 + \$432.11 = \$508.67$  **13. a.** \$354.99

- b.** \$4.44 **c.** \$435.88 **Section 7-3 15. a.** \$2.86

- b.** \$109.76 **17. a.** \$31.47 **b.** \$0.47 **c.** \$38.58

- Section 7-4 19. a.** \$261.02 **b.** \$5.22 **c.** \$301.01

## Chapter 8 Loans

- Section 8-1 5. a.** \$4.50 **b.** \$904.50 **7. a.** \$34.50

- b.** \$3,484.50 **9. a.** \$164.00 **b.** \$4,964.00 **11. a.** \$21.00

- b.** \$1,021.00 **13.** \$24,864 **15.** \$3,257.18 **17.** 0.40

- 19.** 0.07 **21.**  $\frac{1}{2}$  **23.** 0.667 **25.** 0.35

- Section 8-2 5. a.** \$120 **b.** \$520 **7. a.** \$1,500

- b.** \$8,274 **9. a.** \$1,422 **b.** \$8,058 **11.** \$1,165

- 13.** \$7,115.68 **15.** \$3,216 **17.** \$3,190.36 **19.** 25%

- 21.** 0.32 **23.** 0.25 **25.** 65 **27.** \$49.96 **29.** \$414.00

- Section 8-3 3. a.** \$17.16 **b.** \$171.60 **c.** \$1,029.60

- d.** \$29.60 **5. a.** \$4.52 **b.** \$253.12 **c.** \$6,074.88

- d.** \$474.88 **7. a.** \$3.13 **b.** \$298.92 **c.** \$10,761.12

- d.** \$1,211.12 **9. a.** \$57.63 **b.** \$133.12 **11. a.** \$4,000

- b.** \$16,000 **c.** \$619.20 **d.** \$2,576.00 **13.** \$92.60

- 15.** \$30.68 **17.** \$1,315.20 **19.** Save \$96.48 w/9%

- 21.** Save \$162.54 w/10% for 24 months **23.** 25.246

- 25.** 1,224.50

- Section 8-4 5.** \$1,105.44 **7. a.** \$28.83 **b.** \$179.12

- c.** \$3,280.88 **9. a.** \$54.00 **b.** \$275.04 **c.** \$6,924.96

- 11.** \$1,236.53 **13. a.** \$10.36 **b.** \$202.76 **c.** \$833.02

- 15. a.** \$6.28 **b.** \$206.84 **c.** \$421.39 **17. a.** \$214.60

- b.** \$2.12 **c.** \$212.48 **d.** \$0.00; You need to adjust the last

- payment to \$214.60 in order to zero out the loan. **19.** \$900

- 21.** \$282.07 **23.** \$91.24 **25.** \$1,476.78

- Section 8-5 5. a.** \$20.00 **b.** \$3,020.00 **7. a.** \$29.91

- b.** \$4,017.51 **9.** \$42.35; \$5,124.56; \$407.44 **11.** \$619.98;

- \$6.42 **13.** 823.35 **15.** 1,625.76 **17.** 320.57

- Section 8-6 5. a.** 6.64 **b.** 6.25% **7. a.** \$12.81

- b.** 8% **9.** 7.25% **11.** 7.75% **13.** 5.5% **15.** 9.25%

- 17.** 6.25% **19.** 11.24% **21.** 5.25% **23.** ABC: 10.25%;

- Atco: 10.50% **25.** Computer: FC: \$52.16; APR: 7%;

TP: \$1,252.16; Small business loan: FC: \$27.92; APR: 5%; TP: \$1,227.92; Based on APR the loan should be a small business loan. **27.** \$12.42 **29.** 30 **31.** 56.21

**Study Guide and Assessment** **1.** True **3.** True  
**5.** False **7.** False **9.** False **Section 8-1** **11.** \$22,006.33  
**13. a.** \$12.66 **b.** \$1,552.66 **Section 8-2** **15.** \$587.33 – \$147.00 = \$440.33 **17. a.** \$300 **b.** \$489 **Section 8-3**  
**19.**  $(\$3,500 \div 100) \times 3.87 = \$135.45$ ;  $30 \times \$135.45 = \$4,063.50$ ;  $\$4,063.50 - \$3,500 = \$563.50$  **21. a.** \$17.06  
**b.** \$255.90 **c.** \$1,535.40 **d.** \$35.40 **Section 8-4**  
**23. a.** \$39.00 **b.** \$264.55 **c.** \$3,635.45 **25. a.** \$8.67  
**b.** \$96.76 **c.** \$1,203.24 **27.**  $\$3,733.55 \times 14\% \times \frac{1}{12} = \$43.558$  or \$43.56 **Section 8-5** **29. a.** \$30.00  
**b.** \$3,630.00 **31. a.** \$48.61 **b.** \$4,909.41 **Section 8-6**  
**33. a.** \$2.26 **b.** 7.75% **35. a.** \$6.40 **b.** 8%

**Cumulative Test Prep** **1.** C **3.** B **5.** C **7.** Interest: \$15.40; payment to principal: \$121.35; new principal: \$1,418.65 **9.** 15% **11.** To check for accuracy, check to see if the payments and new purchases are covered. **13.** Credit cards are important today, since most people do not like to carry a lot of cash. However, the pervasive use of credit cards has riddled the nation in debt, causing an increase in personal bankruptcy. The cost of keeping a high balance can be expensive. Generally, answers will vary.

## Chapter 9 Vehicle Transportation

**Section 9-1** **5.** \$11,000.00 **7.** \$23,145.00 **9.** \$54,128.00  
**11.** \$19,390.00 **13.** \$803.45 **15.** 9,064 **17.** 13,306  
**19.** 9,609.70

**Section 9-2** **3.** \$8,410 **5.** \$13,127 **7.** \$28,286.48  
**9.** \$33,374.44 **11.** \$81,393.05 **13.** 147 **15.** 364.8  
**17.** 2,683.2

**Section 9-3** **3. a.** \$13,050 **b.** \$13,700 **5. a.** \$14,675  
**b.** \$15,465 **7.** \$17,975 **9.** \$12,690 **11.** 8,635 **13.** 1,360

**Section 9-4** **3. a.** \$642.80 **b.** \$835.64 **5.** Annual Base Premium: \$622.40; Annual Premium: \$622.40 **7.** Annual Base Premium: \$683.60; Annual Premium: \$1,469.74 **9.** Annual Base Premium: \$472.40; Annual Premium: \$1,488.06 **11.** 597.2  
**13.** 99.875 **15.** 264.03

**Section 9-5** **5. a.** \$2,805 **b.** \$0.255 = \$0.26  
**7. a.** \$2,518.35 **b.** \$0.370 = \$0.37 **9. a.** \$3,200  
**b.** \$0.336 = \$0.34 **11.** \$0.280 = \$0.28 **13.** \$0.513 = \$0.51 **15.** 15.35 **17.** 15.91 **19.** 0.32 **21.** 3

**Section 9-6** **5. a.** \$9,552 **b.** \$10,331 **7. a.** \$9,720  
**b.** \$11,051 **9.** \$23,425 **11.** \$12,787 **13.** Total lease cost: \$23,010; Total cost to purchase: \$32,456 **15.** \$16,799.60 to lease; \$14,563.08 to purchase; best to purchase **17.** 119.8

**Section 9-7** **5. a.** \$244.88 **b.** \$0.394 = \$0.39  
**7. a.** \$86.89 **b.** \$0.362 = \$0.36 **9. a.** \$183.02 **b.** \$0.384 = \$0.38 **11. a.** \$324.38 **b.** \$0.623 = \$0.62 **13.** \$361.64; \$0.861 = \$0.86 **15.** \$0.536 = \$0.54 **17.** 508.35  
**19.** 23.818 = 23.82 **21.** 1.39

**Study Guide and Assessment** **1.** depreciation  
**3.** deductible clause **5.** sticker price **7.** used-vehicle guides  
**9.** variable costs **Section 9-1** **11.** \$13,700 **13.** \$19,102  
**Section 9-2** **15.** \$15,575 **17.** \$21,832 **Section 9-3**  
**19.**  $\$14,500 + \$150 + \$700 - \$600 - \$560 = \$14,190$   
**21.** \$14,690 **23.** \$9,025 **Section 9-4** **25.** \$272.40 + \$122.00 + \$307.60 = \$702 annual base premium;  $\$702 \times 3.85 = \$2,702.70$  **27. a.** \$642.80 **b.** \$771.36 **Section 9-5**  
**29. a.** \$4,587.33 **b.** \$0.48 **31. a.** \$3,440.33 **b.** \$0.24

**Section 9-6** **33. a.** \$4,992 **b.** \$5,636 **35. a.** \$6,660  
**b.** \$8,314 **Section 9-7** **37. a.** \$208.82 **b.** \$0.24  
**39. a.** \$170.24 **b.** \$0.19

## Chapter 10 Housing Costs

**Section 10-1** **3.** \$69,600 **5. a.** \$74,700 **b.** \$224,100  
**7.** \$61,920 **9.** \$69,200 **11.** \$70,560 **13.** \$6,000  
**15.** \$18,000 **17.** 76,000

**Section 10-2** **3. a.** \$540.40 **b.** \$162,120.00  
**c.** \$92,120.00 **5. a.** \$2,151.00 **b.** \$387,180.00  
**c.** \$162,180.00 **7. a.** \$540.00 **b.** \$162,000.00  
**c.** \$82,000.00 **9.** \$87,912 **11.** \$556.20; \$100,116.00  
**13.** 5.5% for 25 years; \$13,596 **15.** 15,523.2 **17.** 53,300  
**19.** 353,821.50

**Section 10-3** **3.** \$3,665 **5. a.** \$14,715 **b.** \$434,715  
**7.** \$2,811.25; \$89,311.25 **9.** 1,350 **11.** 17,640 **13.** 2,739  
**15.** 276 **17.** 8.92

**Section 10-4** **7.** \$49,855.33 **9. a.** \$275.00  
**b.** \$93.40 **c.** \$59,906.60 **11. a.** \$1,312.50 **b.** \$125.25  
**c.** \$224,874.75 **13.** \$420 **15. a.** \$612.50 **b.** \$73.50  
**c.** \$97,926.50 **17.** \$1,050; \$147; \$179,853 **19.** 47,970.54  
**21.** 24,376.88 **23.** 18,139.89

**Section 10-5** **5.** \$63,920 **7.** \$4,743.60 **9.** \$13,570.20  
**11.** 2,924.32 **13.** 58.121 **15.** 63,000

**Section 10-6** **5.** \$95,000 **7. a.** \$115,200 **b.** \$23,040  
**9. a.** \$259,200 **b.** \$129,600 **c.** \$51,840 **d.** \$25,920  
**11.** \$24,000

**Section 10-7** **3.** \$183 **5.** \$662 **7.** Mortgage payment: \$1,003.20 per month; insurance:  $\$459 \div 12 = \$38.25$  per month; taxes:  $\$2,707.95 \div 12 = \$222.66$  per month  
**9.** 112,000 **11.** 35,000 **13.** 10,710

**Section 10-8** **3.** \$1,365 **5.** \$1,499 **7.** \$2,780  
**9. a.** \$1,103.90 **b.** Yes; \$1,103.90 < \$1,120.00  
**11.** \$994.71; No; \$875 **13.** Mortgage: \$880.80; insurance: \$52.08; taxes: \$357.85; total: \$1,538.18; FHA: Yes  
**15.** 74,846.50 **17.** 515.13 **19.** 1,840

**Study Guide and Assessment** **1.** premium  
**3.** closing costs **5.** principal **7.** market value  
**9.** replacement value **Section 10-1** **11. a.** \$33,150  
**b.** \$99,450 **13. a.** \$53,585 **b.** \$252,615 **Section 10-2** **15. a.** \$463.57 **b.** \$139,071.00 **c.** \$63,571.00  
**17. a.** \$836.33 **b.** \$250,899.00 **c.** \$126,999.00  
**Section 10-3** **19.** \$8,946.80 **21.** \$4,929.28 **Section 10-4** **23. a.** \$350.00 **b.** \$49.00 **c.** \$59,951.00  
**25. a.** \$727.50 **b.** \$145.50 **c.** \$145,354.50 **Section 10-5**  
**27.**  $\$95,000 \times 45\% = \$42,750$  assessed value;  $54.5 \div 1,000 = 0.0545$  tax rate as decimal;  $0.0545 \times \$42,750 = \$2,329.88$  real estate tax **29.** \$7,095.61 **Section 10-6** **31.** \$112,050  
**33. a.** \$212,500 **b.** \$21,250 **Section 10-7** **35.** \$241  
**37.** \$391 **Section 10-8** **39.** \$889 **41.** \$454.30

## Chapter 11 Insurance

**Section 11-1** **3. a.** 40% **b.** \$1,192.00 **c.** \$99.33  
**5. a.** 25% **b.** \$1,516.50 **c.** \$126.38 **7. a.** 15%  
**b.** \$2,190 **c.** \$182.50 **9. a.** \$2,975.00 **b.** \$123.96  
**11.** \$23.92 **13.** \$370.50 **15.** 40% **17.** 35% **19.** 133.48  
**21.** 168.35

**Section 11-2** **3. a.** \$400 **b.** \$4,800 **c.** \$5,400  
**5. a.** \$320 **b.** \$21,600 **c.** \$22,520 **7.** Deductible: \$1,800; Co-pay: \$976.50; Hospital charges: \$4,730; Total paid: \$7,506.50  
**9.** \$498 **11.** 113 **13.** 54,465 **15.** 49,355

**Section 11-3** 5. a. \$2.13 b. \$127.80 7. a. 95  
b. \$2.29 c. \$217.55 9. 27.5% 11. \$138.45 13. a. \$540  
b. \$45 c. \$1,543.75 d. \$2,700 15. 544.714 17. 21.624  
19. 18.400 21. 0.152 23. 1,402.14 25. 3,481

**Section 11-4** 5. a. 50 b. \$6.25 c. \$312.50 d. \$26.56  
7. a. 200 b. \$25.00 c. \$5,000 d. \$425 9. a. \$725.00  
b. \$366.13 11. \$29.00; \$348.00 13. \$228.00; \$1,572.00  
15. 3.05 17. 0.26 19. 0.33

**Study Guide and Assessment 1–9.** Definitions will vary.  
Evaluate based on the students' understanding of the term and  
their ability to put the definition into their own words. **Section**

**11-1** 11. a. 35% b. \$1,052.10 c. \$87.68 13. a. 25%  
b. \$1,458 c. \$121.50 15. a. 15% b. \$384 c. \$32

**Section 11-2** 17. a. \$150 b. \$3,000 c. \$3,650  
19. a. \$450 b. \$10,000 c. \$10,650 21. a. \$410  
b. \$15,750 c. \$16,310 **Section 11-3** 23. \$125,000 ÷  
1,000 = 125 units purchased; \$5.84 premium per \$1,000;  
125 × \$5.84 = \$730 annual premium 25. a. 50 b. \$2.47  
c. \$123.50 27. a. 80 b. \$4.17 c. \$333.60 29. a. 200  
b. \$9.71 c. \$1,942.00 **Section 11-4** 31. a. 50  
b. \$11.75 c. \$587.50 d. \$49.94 33. a. 150 b. \$13.75  
c. \$2,062.50 d. \$175.31 **Alternative Assessment**

35. Doctor can take a vacation and can share cost of equipment  
and office. 37. Answers will vary.

## Chapter 12 Investments

**Section 12-1** 5. a. 1.050945 b. \$4,729.25 c. \$229.25  
7. a. 1.208796 b. \$10,879.16 c. \$1,879.16 9. \$26,338.58  
quarterly; \$26,347.48 daily; \$8.90 difference 11. \$3,739.35  
interest on Granite; \$3,470.55 interest on Hancock; \$268.80 more  
at Granite 13. 140 15. 0.067 17. 4.641 19. 2,191.06

**Section 12-2** 5. a. \$6,212.77 b. \$212.77 c. 3.55%  
7. a. 1.015104 b. \$5,075.52 c. \$75.52 d. 1.51%  
9. 4.00% compounded daily 11. 6% daily: \$618.31 (interest);  
6.1831% (effective annual yield); 6% monthly: \$616.78 (interest);  
6.1678% (effective annual yield) 13. \$11,734.98 vs. \$11,735.01  
(the amount is about the same) 15. 125.64% 17. 30,000  
19. 33,960

**Section 12-3** 3. a. \$11,050.00 b. \$11,059.99  
5. a. \$17,800.00 b. \$17,845.50 7. a. \$16,450.00  
b. \$16,515.00 9. \$18,900; \$18,960 11. \$21,805.37  
13. It costs \$2.39 more to buy \$6,999 of stock than to  
buy \$7,000 of stock. 15. \$5,882.95 17. \$18,200  
19. \$22,952

**Section 12-4** 3. 0.01690 = 1.69% 5. 0.01088 = 1.09%  
7. 9.53% 9. a. \$608.00 b. 2.71% 11. \$203; 1.36%  
13. 6.34%; 4.75% 15. 0.12 17. 65.22 19. 25.83%  
21. 3.126%

**Section 12-5** 3. a. \$7,170 b. \$1,970 profit  
5. a. \$6,480 b. \$280 loss 7. \$848 profit 9. \$11,942.05  
sale; \$3,457.10 profit 11. \$73,000.00 + (\$49.95 + \$40.00) =  
\$73,089.95; \$96,500.00 - (\$49.95 + \$40.00) = \$96,410.05; Net  
amount of sale: \$96,410.05; Profit: \$23,320.10 13. \$2,430.00  
+ \$48.60 = \$2,478.60; \$5,670.00 - \$170.10 = \$5,499.90;  
Profit: \$3,021.30 15. 381.6 17. \$219.84 19. 14.92  
21. 16.492 23. 108.4176

**Section 12-6** 5. a. \$7,025 b. \$300 c. 4.27%  
7. a. \$10,400 b. \$525 c. 5.05% 9. a. \$450 b. \$9,950  
c. 4.52% 11. \$1,500; \$47,187.50; 3.18% 13. \$33,819.19  
total purchase; \$2,175.00 yearly earnings; 2013 bond matures  
15. 13,987.50 17. 1,080 19. 1,034 21. 31.34

**Study Guide and Assessment 1–7.** Definitions will  
vary. **Section 12-1** 9. a. 1.030416 b. \$6,697.70  
c. \$197.70 11. a. 1.053899 b. \$3,688.65 c. \$188.65  
13. a. 1.172579 b. \$41,040.27 c. \$6,040.27 **Section**  
**12-2** 15. a. 1.053543 b. \$4,740.94 c. \$240.94  
d. 5.35% 17. a. 1.207897 b. \$30,801.37 c. \$5,301.37  
d. 4.84% 19. a. 1.020184 b. \$10,201.84 c. \$201.84  
d. 2.02% **Section 12-3** 21. a. \$7,318.50 b. \$7,368.50  
23. a. \$135,907 b. \$135,946.50 25. a. \$120,020  
b. \$120,042 **Section 12-4** 27. Annual yield on high price:

$\frac{\$2.31}{\$54.54} = 0.04235$  or 4.24%; Annual yield based on low price:  
 $\frac{\$2.31}{\$44.45} = 0.05196$  or 5.20%; Total annual dividend:  $200 \times \$2.31$   
= \$462 29. 2.441% 31. 2.034% **Section 12-5**  
33. a. \$7,756.50 b. \$1,956.50 profit 35. a. \$513.50  
b. \$1,286.50 loss 37. a. \$2,918 b. \$332 loss **Section**  
**12-6** 39. a. \$3,105 b. \$135 c. 4.35% 41. a. \$3,762.50  
b. \$125 c. 3.32% 43. a. \$10,100 b. \$375 c. 3.71%

## Chapter 13 Personnel

**Section 13-1** 3. \$979.10 5. \$2,417.90 7. \$12,880.70  
9. \$6,128.65 11. \$47,492.55 13. \$2,325 15. \$17,698  
17. \$5,380.40

**Section 13-2** 3. \$69,160 5. \$38,220 7. \$33,930  
9. a. \$893 b. \$917 c. \$942.30 11. \$47,500  
13. \$55,000 15. \$1,849.86

**Section 13-3** 3. 27.1% 5. 20% 7. 32% 9. a. See  
table below. b. 18.2% 11. \$1,854.97 13. \$951.05  
15. 40%

**Section 13-4** 3. a. \$20,000 b. \$1,666.67  
5. a. \$20,563.20 b. \$1,713.60 7. a. \$21,932.40  
b. \$1,827.70 9. \$531 11. a. \$26,380.73 b. \$2,198.39  
13. \$1,381.71 15. 35 17. 39 19. 38 21. \$959.30  
23. \$525.17

**Section 13-3** 9. a.

Position	Annual Wage	2-Week Vacation	3.6% Workers Comp.	8-Day Sick Leave	6.2% FICA	1.45% Medicare	Total Benefits
Manager	\$47,580	\$1,830.00	\$1,712.88	\$1,464.00	\$2,949.96	\$689.91	\$8,646.75
Counter 1	27,560	1,060.00	992.16	848.00	1,708.72	399.62	5,008.50
Counter 2	22,620	870.00	814.32	696.00	1,402.44	327.99	4,110.75
Cleanup	14,560	560.00	524.16	448.00	902.72	211.12	2,646.00

**Section 13-5** 3. \$48.02 5. \$479.46 7. \$296.14  
 9. a. \$7,000 b. \$490.00 c. 0.8% d. \$56.00  
 11. a. \$4,800 b. \$105.60 c. 4.0% d. \$192.00  
 13. a. \$7,000 b. \$70.00 c. 5.2% d. \$364.00  
 15. Koster: a. \$7,000 b. \$56.00 c. \$637.00; Ahmed:  
 a. \$7,000 b. \$56.00 c. \$637.00; Morales: a. \$7,000  
 b. \$56.00 c. \$637.00; Gallos: a. \$7,000 b. \$56.00  
 c. \$637.00; Haddad: a. \$7,000 b. \$56.00 c. \$637.00; Brown:  
 a. \$6,850.00 b. \$54.80 c. \$623.35; Lopez: a. \$6,240.00  
 b. \$49.92 c. \$567.84; Woo: a. \$4,650.00 b. \$37.20  
 c. \$423.15 17. \$3,594.24 19. \$1,127.07 21. \$293.11  
**Section 13-6** 3. a. \$25.60 b. \$72.50 5. a. \$57.60  
 b. \$338.00 7. a. \$199.36 b. \$1,008.15 9. \$524.70  
 11. \$1,184.52 13. \$73.50 15. \$136.40 17. \$108.00  
 19. \$139.26 21. \$332.40 23. \$280.41 25. \$345  
 27. \$410.27

**Section 13-7** 3. \$915 5. \$2,838 7. \$1,455 9. \$5,390.00  
 11. \$5,508 13. \$5,732 15. \$580 17. \$592 19. \$916.35  
 21. \$110.17 23. \$1,849 25. \$3,391.06

**Study Guide and Assessment** 1. salary scale  
 3. employee benefits 5. travel expenses 7. disability insurance  
**Section 13-1** 9. \$1,012.14 11. \$2,949.75 **Section 13-2**  
 13. \$31,140 15. \$60,176 17. \$109,060 **Section 13-3**  
 19. a. \$2,511.54 b. \$2,350.80 c. \$2,260.35 d. \$4,048.60  
 e. \$946.85 f. \$12,118.14 g. 18.56% 21. a. \$846.15  
 b. \$792 c. \$761.54 d. \$1,364.00 e. \$319 f. \$4,082.69  
 g. 18.56% 23. a. \$1,361.54 b. \$1,274.40 c. \$1,225.38  
 d. \$2,194.80 e. \$513.30 f. \$6,569.42 g. 18.56%  
**Section 13-4** 25. a. \$27,360 b. \$2,280 27. a. \$41,470  
 b. \$3,455.83 29. a. \$22,411.20 b. \$1,867.60 **Section**  
**13-5** 31. \$99.23 33. \$37.20; \$251.10 **Section 13-6**  
 35. a. \$32.96 b. \$169.61 37. a. \$62.08 b. \$191.64  
 39. a. \$237.44 b. \$613.22 **Section 13-7** 41. \$5,020.00  
 43. \$1,760 45. \$540 47. Answers will vary.

**Cumulative Test Prep** 1. A 3. B 5. C 7. B  
 9. \$830.50 11. \$13,344 13-15. Answers will vary.

## Chapter 14 Production

**Section 14-1** 3. \$0.092 5. a. \$0.014 b. \$0.022  
 c. \$0.036 7. \$0.003 9. \$0.058 11. \$0.033 13. \$0.061  
 15. \$0.215 17. \$0.007 19. \$0.072 21. \$0.05 23. \$0.077  
 25. \$0.147 27. \$0.038 29. \$0.041 31. \$0.023

**Section 14-2** 3. 95,000 5. 450,000 7. 19,281  
 9. 28,986 11. 230,941 13. 480,000 15. \$5.36  
 17. \$6.75 19. \$37.59 21. 190,000 23. 274,039

**Section 14-3** 3. 4%; In 5. 8%; Out 7. 5%; In 9. In  
 (5%) 11. 8%; Out 13. 9 A.M. 2%; 11 A.M. 0%; 1 P.M. 6%;  
 3 P.M. 4%; 5 P.M. 4%; Out of control at 1 P.M. 15. 1.3%; 2.7%;  
 1.3%; 0%; 2.7%; 1.3%; 4%; 5.3%; 1.3%; 0%; Out of control at  
 checkpoint 7. 17. 4% 19. 16% 21. 5.3% 23. 4%

**Section 14-4** 5.  $75.5 = 76$  7.  $490.9 = 491$  9.  $140.1 = 140$   
 11. 115 13. 70 15. 5 17. 1,250 19. 67

**Section 14-5** 5.  $0.375 = 37.5\%$  7.  $0.125 = 12.5\%$   
 9.  $0.3125 = 31.25\%$  11.  $0.37333 = 37.33\%$  13.  $0.3 = 30\%$   
 15. Loading truck  $0.14444 = 14.44\%$ ; Driving truck  $0.34444 = 34.44\%$ ;  
 Delivering bread  $0.24444 = 24.44\%$ ; Recording sale  $0.05555 = 5.56\%$ ;  
 Checking out  $0.03333 = 3.33\%$ ; Break and miscellaneous  
 $0.06666 = 6.67\%$ ; Lunch  $0.11111 = 11.11\%$ ; 73.32% spent  
 loading, driving, and delivering 17. 10 19.  $0.23333 = 23.33\%$

**Section 14-6** 5. 0.8 cm 7. 12.8 cm 9. 0.4 cm  
 11. 25.2 cm 13. 0.6 cm 15. 49.4 cm 17. Without top and

bottom flaps:  $21 (W) \times 20.25 (L) \times 19.75 (H)$ ; With top and  
 bottom flaps:  $21 (W) \times 20.25 (L) \times 20.50 (H)$  19. Height =  
 $13\frac{5}{8}$  in; Length =  $22\frac{1}{8}$  in; Width =  $18\frac{3}{4}$  in 21.  $\frac{5}{8}$  23.  $\frac{7}{16}$  25.  $\frac{3}{4}$   
 27. 3 29.  $\frac{5}{16}$  31.  $4\frac{1}{2}$

**Study Guide and Assessment** 1-13. Answers will vary.

**Section 14-1** 15. a. \$0.03750 b. \$0.01250 c. \$0.05  
 17. a. \$0.02167 b. \$0.03590 c. \$0.06 19. a. \$0.11000  
 b. \$0.01893 c. \$0.13 **Section 14-2** 21. 75,000

23. 164,935 25. 18,238 **Section 14-3** 27. a. 6.67%  
 b. Out 29. a. 2.22% b. In 31. a. 4.44% b. Out

**Section 14-4** 33. 57 35. 77 37. 76 **Section**  
**14-5** 39. 25% 41. 15.63% 43. 21.88% **Section 14-6**  
 45. 15.6 cm 47. 28 cm 49. 0.8 cm 51. 28 cm 53. 0.8 cm

## Chapter 15 Purchasing

**Section 15-1** 3. a. \$105 5. a. \$140.00 b. \$260.00  
 7. a. \$55.68 b. \$118.32 9. a. \$8.53 b. \$86.22

11. \$127.02 13. a. \$4.53; \$8.42 b. \$0.90; \$8.09  
 c. \$8.84; 50.11 15. \$11.86; \$1.07; \$34.10; \$200.96;  
 \$106.93; \$71.56 17. \$16.45 19. \$9.73 21. \$915.18  
 23. \$333.28

**Section 15-2** 5. a. \$90.00 7. a. 65% b. \$206.36  
 9. a. 76% b. \$241.64 11. a. 40% b. \$167.16  
 13. \$1,590.60 15. a. \$191.98; \$113.27 b. \$94.00; \$55.46  
 c. \$239.60; \$141.36 d. \$769.50; \$454.01 17. a. \$11.32;  
 \$407.52 b. \$2.47; \$61.75 c. \$4.21; \$25.26 d. \$12.76;  
 \$76.56 19. 50% 21. 78% 23. \$116.57 25. \$7.32  
 27. \$96.00

**Section 15-3** 3. a. 20% 5. a. \$18 b. 30.0%  
 7. a. \$85.10 b. 75.6% 9. a. \$888.89 b. 17.3%  
 11. a. \$400 b. Compute:  $\frac{400}{2,000} = 20\%$  13. WH: 35%; BL:  
 25%; AVO: 33%; GLD: 20% 15. 40%; 33%; 25% 17. \$6.56  
 19. \$11.46 21. \$499.91 23. 0.4 25. 0.2 27. 0.5

**Section 15-4** 3. a. \$70 b. \$280 5. a. \$248  
 b. \$992 c. \$148.80 d. \$843.20 7. a. \$868  
 b. \$1,302 c. \$325.50 d. \$976.50 9. \$60.24  
 11. \$46.93; \$41.44; \$35.02 13. \$349.91; \$100.77; \$40.24;  
 \$5.36 15. \$114 17. \$8,178.14 19. \$51 21. \$56.61  
 23. \$425.91 25. \$13,530.44 27. \$167.61 29. \$1,025.27  
 31. \$5,614.77

**Section 15-5** 5. a. 44% b. \$272.80 7. a. 48%  
 b. \$209.28 c. 52% d. \$226.72 9. a. 50.4%  
 b. \$74.49 c. 49.6% d. \$73.31 11. a. \$1,644.75  
 b. \$505.25 13. a. \$74.15; 50.50% b. \$108.65; 50.50%  
 c. \$14.85; 50.50% 15. a. \$31.77; \$46.68 b. \$181.85;  
 \$159.97 c. \$35.35; \$23.02 d. \$101.14; \$46.72  
 17. \$19.72 19. \$912.41 21. 70% 23. 75%  
 25. 90% 27. \$175.29

**Section 15-6** 7. a. \$725.20 9. a. 9/18 b. 10/3  
 c. 0 (no discount) d. \$348.64 11. a. 10/17 b. 11/06  
 c. \$6,447.17 13. \$505.68 15. \$3,051.28 17. \$9,295.31  
 19. \$8.30 21. \$843.40

**Section 15-7** 5. \$602.70 7. a. 10/10 b. 10/30  
 c. \$287.39 d. \$6,897.34 9. a. 10/10 b. 10/30  
 c. \$907.24 11. 9/15; 9/30; \$723.78 13. \$16.42  
 15. \$1,011.45 17. \$8,356.07

**Study Guide and Assessment** 1. ordinary dating  
 3. chain discount 5. net price 7. list price 9. net-price rate  
 11. single equivalent discount **Section 15-1** 13. a. \$39.60  
 b. \$92.40 15. a. \$39.57 b. \$356.08 17. a. \$32.07  
 b. \$305.48 **Section 15-2** 19.  $100\% - 47\% = 53\%$

- complement of trade-discount rate a.  $9 \times \$36.54 = \$328.86$  total list;  $\$328.86 \times 53\% = \$174.30$  net price  
b.  $30 \times \$95.41 = \$2,862.30$  total list;  $\$2,862.30 \times 53\% = \$1,517.02$  net price c.  $100 \times 2.99 = \$299$ ;  $\$299 \times 53\% = \$158.47$  net price 21. a. 63% b. \$59.54  
23. a. 55% b. \$357.57 25. a. 25% b. \$0.82  
**Section 15-3** 27. a. \$25.45 b. 29.8% 29. a. \$65.00 b. 18.5% 31. a. 1,303.13 b. 20.6% **Section 15-4**  
33. a. \$160 b. \$480 c. \$48 d. \$432 35. a. \$1,418 b. \$2,127 c. \$319.05 d. \$1,807.95 37. a. \$591 b. \$2,364 c. \$354.60 d. \$2,009.40 **Section 15-5**  
39. a. 48.75% b. \$112.13 c. 51.25% d. \$117.87  
41. a. 63.75% b. \$2,539.80 c. 36.25% d. \$1,444.20  
43. a. 57.38% b. \$8.86 c. 42.62% d. \$6.59  
**Section 15-6** 45. a. July 7 b. July 27 c. \$4.07 d. \$131.53 47. a. March 23 b. April 12 c. \$0 d. \$941.22 49. a. June 10 b. June 25 c. \$7.31 d. \$358.13 **Section 15-7** 51. a. March 10 b. March 30 c. \$10.95 d. \$354.17 53. a. Aug. 10 b. Aug. 30 c. \$48.39 d. \$1,161.42 55. a. Dec. 15 b. Jan. 4 c. \$11.99 d. \$227.88

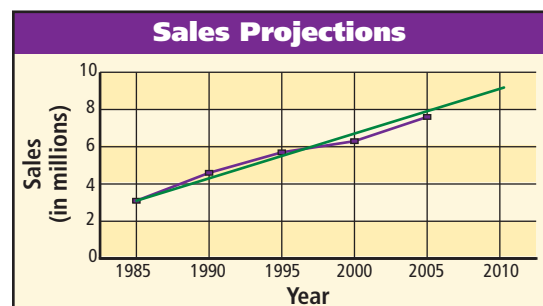
## Chapter 16 Sales

- Section 16-1** 5. \$1,465.00 7. \$164.89 9. \$61.95  
11. \$70.86 13. \$28.11 15. \$4.71 17. \$3.85  
19. \$39.40 21. \$10.89 23. \$86.78 25. \$1.22  
27. \$3.25 29. \$4,406.32  
**Section 16-2** 5. Markup \$80.75; Markup rate 0.4821 = 48.2% 7. 0.4384 = 43.8% 9. 0.3807 = 38.1%  
11. 0.3802 = 38.0% 13. \$15.90 15. 0.2408 = 24.1%  
17. 0.9999 = 100.0%  
**Section 16-3** 5. \$8 7. \$27 9. \$29.96  
11. \$246,461.75 13. \$1.11 15. \$0.46 17. \$0.35  
19. \$48.00 21. \$44.72  
**Section 16-4** 5. a. \$25.00 b. 50% 7. a. \$29.07 b. 19% 9. a. \$3,976.60 b. 47% 11. 16.2%  
13. 30.2% 15. a. 23.8% b. 20.2% 17. 42.2%  
19. \$1.96 21. 29.6% 23. 15.0%  
**Section 16-5** 5. a. \$10.00 7. a. 50% b. \$173.48  
9. a. 62.5% b. \$76.54 11. \$18.70 13. \$6.95  
15. a. \$1.21 b. \$0.21 c. \$0.71 d. \$0.37 e. \$0.42  
17. 65% 19. 50% 21. \$60.00  
**Section 16-6** 5. a. \$0.50 b. 40.0% 7. a. \$38.00 b. 80.0% 9. a. \$0.91 b. 700.0% 11. 150.0%  
13. 205.1% 15. 123.6% 17. a. 150.0% b. 66.7%  
c. 100.0% d. 185.7% e. 144.7% f. 68.4% g. 68.1%  
h. 83.7% i. 12.9% 19. \$89.69 21. 150.0%  
23. 25.0%  
**Section 16-7** 5. a. \$81.00 7. a. \$129.60 b. \$216.00  
9. a. \$657.83 b. \$1,409.63 11. \$178.99 13. \$33.48  
15. \$295.70 17. \$0.82 19. a. 2.29 b. 62.4%  
21. \$129.00 23. \$1,919.49 25. \$180.00  
**Section 16-8** 5. a. \$5.00 b. 20.0% 7. a. \$97.88 b. 39.5% 9. 40.4% 11. 14.4% 13. 25.3% 15. 33.3%  
17. \$60.00 19. 30.0% 21. 20.2% 23. 34.9%  
25. 15.0% 27. 33.3% 29. 25.0%  
**Study Guide and Assessment** 1. markdown 3. net profit 5. markdown rate 7. operating expenses 9. gross profit **Section 16-1** 11. \$0.29 13. \$38.74 15. \$24.15  
17. a. \$1.51 b. \$54.36 **Section 16-2** 19. a. \$6.14 b. 48.8% 21. a. \$400.47 b. 30.8% 23. a. \$10.45 b. 40.3% **Section 16-3** 25. \$53.26 27. \$55.90

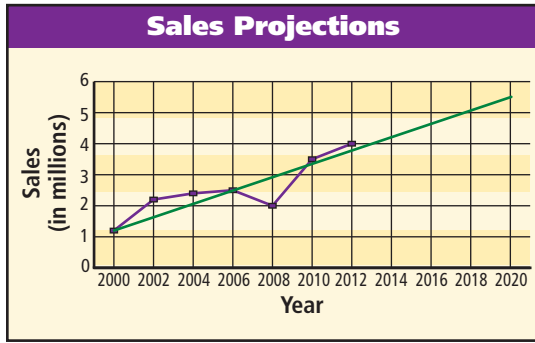
29. \$7.96 **Section 16-4** 31. a. \$33.31 b. 45.4%  
33. a. \$27.76 b. 25.2% 35. a. \$160.27 b. 8.2%  
**Section 16-5** 37. a. 78% b. \$135.26 39. a. 68% b. \$122.40 41. a. 81.5% b. \$1,238.22 **Section 16-6**  
43. a. \$11.42 b. 61.6% 45. a. \$30.00 b. 37.5%  
47. a. \$34.25 b. 61.7% **Section 16-7** 49. a. \$185.50 b. \$371 51. a. \$126.30 b. \$189.45 53. a. \$759.02 b. \$1,600.04 **Section 16-8** 55. a. \$65.55 b. 39.6%  
57. a. \$895.50 b. 47.2% 59. a. \$7.17 b. 56.6%  
61. Answers will vary.

## Chapter 17 Marketing

- Section 17-1** 3. 80.0% 5. 60.0% 7. 89.0%  
9. a. Definitely: 405; Probably: 602; Possibly: 451; No: 282  
b. Under 25: 306; 25–34: 527; 35–49: 513; 50 and over: 394  
c. 1,740 d. Definitely: 23.3%; Probably: 34.6%; Possibly: 25.9%; No: 16.2% e. Under 25: 13.1%; 25–34: 37.3%; 35–49: 31.1%; 50 and over: 18.5% f. 25–34 g. Under 25: 32.3%; 25–34: 20.2%; 35–49: 19.1%; 50 and over: 28.4%  
h. Under 25 11. 56  
**Section 17-2** 3. a. 200,000 5. a. 20.0% b. 1,140,000  
7. a. 2.5% b. 8,150,000 9. 500,000 11. 2,250,000  
13. 0.45  
**Section 17-3** 3. 40.0% 5. 28.0% 7. 6.0% 9. 10.0%  
11. 9.1% 13. 36.5% 15. 4.3% 17. 4.8% 19. 14.0%  
21. 70.0% 23. 23.0 25. 0.7  
**Section 17-4** 3. \$37,000 5. \$44,000 7. \$50,000  
9. 2010: \$15 million; 2015: \$16 million; 2020: \$17 million  
11. \$44,286.00 13. 17.600 15. Fifty-two  
**Section 17-5** 3. \$400,000 5. \$4,050,000 7. \$324,000  
9. \$617,500 11. \$130,224 13. 44,650 15. \$3,188.25  
17. 1,015.00 19. \$480.00 21. \$850.00  
**Section 17-6** 3. a. \$385.65 5. a. \$37.52 b. \$375.20  
7. a. \$49.50 b. \$247.50 9. \$744.00 11. \$3,517.20  
13. \$3,892.91 15. \$2,424.75  
**Section 17-7** 5. \$110,000 7. \$345,000 9. \$3,858,250  
11. \$307,500 13.  $\frac{1}{8}$   
**Section 17-8** 3. \$120,000 5. a. \$17.14 b. \$38.14  
c. \$258,020 7. Selling price of \$3.75: \$0.53; \$1.58; \$2,061,500; Selling price of \$4.50: \$0.71; \$1.76; \$1,918,000; Selling price of \$8.50: \$1.67; \$2.72; \$1,734,000; Selling price of \$10.25: \$2.00; \$3.05; \$1,800,000; Selling price of \$3.75 yields greatest possible profit of \$2,061,500.; 950,000 units should be produced. 9. 11.877  
**Study Guide and Assessment** 1–9. Students' definitions will vary. Make sure they use their own words and show an understanding of the definition. **Section 17-1** 11. 11%  
13. 30.6% 15. 20.8% **Section 17-2** 17. a. 33.3% b. 99,900 19. a. 50% b. 3,000,000 21. a. 35.7% b. 44,625 **Section 17-3** 23. 50% 25. 36% 27. 7.5%  
**Section 17-4** 29. Approximately \$9.0 million.



31. Approximately \$5.5 million.



**Section 17-5** 33. \$1,560,000 35. \$1,676,400  
 37. \$16,500,000 **Section 17-6** 39. a. \$26.13  
 b. \$783.90 41. a. \$50.40 b. \$756.00 43. a. \$19.45  
 b. \$1,945 **Section 17-7** 45. \$144,000 47. \$325,000  
 49. \$33,750 **Section 17-8** 51. \$12.50 selling price results  
 in net profit of \$76,250; \$16.00 selling price results in net profit  
 of \$89,000; \$22.00 selling price results in net profit of \$104,250;  
 \$26.00 selling price results in net profit of \$39,500 53. a. \$25  
 b. \$43 c. \$88,000 55. a. \$1.00 b. \$19.00  
 c. \$16,500,000

**Cumulative Test Prep** 1. A 3. A 5. A 7. C  
 9. 68.1% 11. 20% 13. \$550.63 15. \$66,500  
 17. Answers may vary. Defective items could result in loss of  
 customers. 19. It can be hard to collect money. Offering cash  
 discounts is an incentive to pay. It is not always advantageous  
 to pay early if the money is invested somewhere making more  
 money than the discount.

## Chapter 18 Warehousing and Distributing

**Section 18-1** 5. 1,313 cu ft 7. a. 4 b. 80 cu ft  
 9. a. 20 b. 240 cu ft 11. a. 2,056.25 b. 17.8 =  
 18 cu ft 13. 4,800 cu ft 15. 25 cu ft 17. 840 cu meters  
 19. 4,536,000 cu in; 2,625 cu ft 21. 1.12 cu meters  
 23. 2,430 cu meters 25. 2.3625 cu yd  
**Section 18-2** 7. a. 119 b. 82 c. 6 d. 6 9. a. 128  
 b. 74 c. 34 d. 158 e. 115 11. a. 40 b. 184 c. 126  
 13. 90

15.

Date	Receipts	Shipments	Balance
8/01			47
8/06		24	23
8/16	40		63
8/27		36	27
8/31	50		77

17. 195 19. 94 21. 142 23. 8,685  
**Section 18-3** 5. a. \$22.15 b. \$509.45

7. a.

Date	Units Received	Unit Cost	Total Cost
3/10	1,152	\$0.89	\$1,025.28
4/22	936	0.94	879.84
Total	2,088	—	\$1,905.12

7. b. \$0.91 c. \$236.60 9. \$40.61

11. a.

Date	Units Received	Unit Cost	Total Cost
5/01	100	\$9.65	\$ 965.00
5/08	65	9.75	633.75
5/19	145	9.90	1,435.50
Total	310		\$3,034.25

11. b. \$1,550 c. \$1,484.25

100 at \$9.65	=	\$ 965	5 at \$9.75	=	\$ 48.75
60 at \$9.75	=	\$ 585	145 at \$9.90	=	\$1,435.50
160 Total		\$1,550	150 Total		\$1,484.25

13. \$420 15. \$2,656.80 17. \$31.32 19. \$8.37  
 21. \$3.42 23. \$0.87  
**Section 18-4** 3. \$240 5. \$1,170 7. \$38,414.01  
 9. \$32,680.80

11. a.

4.0%	\$15,200
8.0%	30,400
10.0%	38,000
2.0%	7,600
0.5%	1,900
0.5%	1,900
25.0%	95,000

11. b. \$23,750  
 13. \$24,000  
 15. \$43,990  
 17. \$25,070.50

**Section 18-5** 5. a. \$196.00 b. \$1,176.00 7. a. \$160.10  
 b. \$1,215.16 9. \$770.80; \$554.60 11. a. \$384.95  
 b. \$271.33 13. \$73.01 15. \$22.61 17. \$892.04

**Section 18-6** 5. a. \$165.30 b. \$165.30 7. a. \$1.95  
 b. \$167.70 c. \$442.70 9. a. \$3.11 b. \$1,216.01  
 c. \$1,216.01 11. \$632.56 13. \$364.42 15. \$236.64  
 17. \$460.34 19. \$216.87 21. \$365.50

**Study Guide and Assessment** 1. average-cost method  
 3. warehouse 5. first in, first out **Section 18-1** 7. 360  
 cubic ft 9. 105 cubic ft 11. 1,320 cubic ft **Section 18-2**  
 13. a. 599 15. a. 539 b. 464 17. a. 434 b. 503  
**Section 18-3** 19.  $\$733.88 \div 510 = \$1.44$  average cost per  
 unit;  $\$1.44 \times 12 = \$17.28$  inventory value 21. FIFO: \$2,717.50;  
 LIFO: \$277.50 **Section 18-4** 23. \$3,628.50 25. \$3,570  
 27. \$223,125 **Section 18-5** 29. a. \$127.75 b. \$1,277.50  
 31. a. \$46 b. \$552 33. a. \$146.75 b. \$1,323.69  
**Section 18-6** 35. a. \$1.95 b. \$193.05 c. \$243.05  
 37. a. \$2.69 b. \$742.44 c. \$1,067.44 39. a. \$4.30  
 b. \$709.50 c. \$959.50

## Chapter 19 Services

**Section 19-1** 3. a. 450 sq ft b. \$300 5. a. 1,500 sq ft  
 b. \$1,250 7. \$319 9. \$1,560 11. \$1,525 13. \$2,150  
 15. \$756

**Section 19-2** 3. a. \$168.00 b. \$593.00 5. a. \$196.00  
 b. \$1,143.56 7. \$153.60 9. \$962.50 11. \$6.56  
 13. \$146.25 15. \$95.06

**Section 19-3** 3. a. \$94.78 b. \$394.28 5. a. \$102.76  
 b. \$655.10 7. \$1,231.65 9. \$469.90 11. a. \$18,316.26  
 b. Rent for 12 months, \$18,316.26 for 12 months vs. \$18,655.45  
 for 11 months (no discount). Rent for 12 months and save.  
 13. \$2.90

**Section 19-4** 3. \$97.84 5. \$123.59 7. \$123.59  
9. \$141.29 11. \$160.62 13. \$63.93 15. \$36.81  
17. \$44.44

**Section 19-5** 3. \$2,223.90 5. \$647.00 7. \$548.10

**Section 19-6** 5. \$1,500.00 7. \$5,000.00  
9. \$18,450.00 11. \$2,160.00 13. \$63,375.00;  
\$911,625.00 15. \$4,888.20 17. \$21,753.85  
19. \$65,030.00 21. \$211,962.50

**Study Guide and Assessment 1–11.** Definitions will vary. **Section 19-1** 13. a. 200 b. \$150 15. a. 875  
b. \$765.63 17. a. 540 b. \$281.25 **Section 19-2**  
19. a. \$236.25 b. \$558.23 21. a. \$158.40 b. \$780.30  
23. a. \$58.80 b. \$771.70 **Section 19-3** 25. a. \$625.30  
b. \$3,995.67 27. a. \$152.96 b. \$663.85 29. a. \$811.27  
b. \$10,319.35 **Section 19-4** 31. \$153.39 33. \$173.54  
35. \$88.64 **Section 19-5** 37. \$2,485 39. \$2,303.50  
41. \$4,494.00 **Section 19-6** 43. \$1,875 45. \$937.50  
47. \$31,850

**Cumulative Test Prep** 1. B 3. D 5. D 7. D  
9. Receipts are incoming items; issues are outgoing items  
11. \$2,940 13. Demand charge is based on the peak load  
during the month; energy charge is based on the total number

of kilowatt-hours that the business uses during the month.  
15. \$1,832.73 17. It is important so that a business can meet  
sales demands while not keeping excessive quantities. 19. If  
they only need the furniture for a short time.

## Chapter 20 Accounting

### Section 20-1

	Gross Pay	FIT	SS	Medicare	Total Ded.	Net Pay
3. Abbot	\$485.00	\$ 43.00	\$30.07	\$ 7.03	\$ 80.10	\$404.90
5. Jackson	795.00	117.00	49.29	11.53	177.82	617.18
7. Murakami	643.00	67.00	39.87	9.32	116.19	526.81

9. \$12,563.68 11. See table below. 13. See table below.  
15. \$26.40 17. \$410.30 19. \$463.92

**Section 20-2** 3. 3% 5. 31.5% 7. 26.6% 9. 3.8%  
11. 66.7% 13. a. 47.9% b. 2% c. 17.1% d. 22.3%  
e. 4% f. 2.1% g. 4.6% h. \$301,705 15. \$202,783  
17. 25.0%

**Section 20-3** 3. \$1,250 5. \$19,531.25 7. \$2,204.44  
9. See table below. 11. 0.021 13. 0.005

### Section 20-1 11.

Name	Hours	Gross Pay	FIT	SS	Medicare	CIT	Total Ded.	Net Pay
Banks	24	\$ 180.00	\$ 7.00	\$ 11.16	\$ 2.61	\$ 2.52	\$ 23.29	\$ 156.71
Drake	34	255.00	24.00	15.81	3.70	3.57	47.08	207.92
Faust	36	270.00	18.00	16.74	3.92	3.78	42.44	227.56
Harakis	38	285.00	28.00	17.67	4.13	3.99	53.79	231.21
Kendrick	36	270.00	27.00	16.74	3.92	3.78	51.44	218.56
Reese	38	285.00	19.00	17.67	4.13	3.99	44.79	240.21
Segura	30	225.00	19.00	13.95	3.26	3.15	39.36	185.64
<b>Total</b>		<b>\$1,770.00</b>	<b>\$142.00</b>	<b>\$109.74</b>	<b>\$25.67</b>	<b>\$24.78</b>	<b>\$302.19</b>	<b>\$1,467.81</b>

### Section 20-1 13.

Name	Sales	Gross Pay	FIT	SS	Med.	Total Ded.	Net Pay
Aguilar	\$ 4,200.00	\$ 454.50	\$ 45.00	\$ 28.18	\$ 6.59	\$ 83.77	\$ 370.73
Grant	2,786.00	369.66	40.00	22.92	5.36	72.28	297.38
Iskersky	3,865.00	474.90	20.00	29.44	6.89	60.33	414.57
Melendez	4,500.00	540.00	58.00	33.48	7.83	103.31	436.69
Quinn	1,430.00	254.55	24.00	15.78	3.69	47.47	207.08
Valdez	5,184.00	581.04	25.00	36.02	8.43	73.45	507.59
Xerxes	3,146.00	418.26	39.00	25.93	6.06	74.99	343.27
<b>Total</b>	<b>\$25,111.00</b>	<b>\$3,092.91</b>	<b>\$251.00</b>	<b>\$191.75</b>	<b>\$44.85</b>	<b>\$515.60</b>	<b>\$2,577.31</b>

### Section 20-3 9.

Shop	Sq. Ft.	Base Rent	Security	Taxes	Insurance	Maint.	Assoc. Fee	Total
								\$ 19.66
Ken's Carry Out	4,000	\$ 52,000	\$ 3,000	\$ 5,400	\$1,440	\$13,800	\$ 3,000	78,640
The Jean Place	3,000	39,000	2,250	4,050	1,080	10,350	2,250	58,980
Pan's Pizza	2,500	32,500	1,875	3,375	900	8,625	1,875	49,150
World Travel	3,000	39,000	2,250	4,050	1,080	10,350	2,250	58,980
Kay Jewelers	2,500	32,500	1,875	3,375	900	8,625	1,875	49,150
<b>Total</b>	<b>15,000</b>	<b>\$195,000</b>	<b>\$11,250</b>	<b>\$20,250</b>	<b>\$5,400</b>	<b>\$51,750</b>	<b>\$11,250</b>	<b>\$294,900</b>



**Section 20-4** 3. \$4,000 5. \$1,275 7. \$48,500  
9. \$12,747 11. \$48,333.33 13. \$1,974.37 15. \$611.43  
17. \$48,1745

**Section 20-5** 5. a. \$800 b. \$3,200 c. \$1,800  
7. a. \$2,000 b. \$6,000 c. \$9,000 9. a. \$2,000  
b. \$10,000 c. \$5,000 11. a. \$2,000 b. \$14,000  
c. \$1,000 13. a. \$4,330 b. \$8,660 c. \$4,330

15.

End of Year	Original Cost	Depreciation	Accumulated Depreciation	Book Value
1	\$1,880	\$240	\$ 240	\$1,640
2	1,880	240	480	1,400
3	1,880	240	720	1,160
4	1,880	240	960	920
5	1,880	240	1,200	680
6	1,880	240	1,440	440
7	1,880	240	1,680	200

17. \$6,200 19. \$17,500 21. \$49,050

**Section 20-6** 3-5. See table below.

7.

Year	Original Cost	Fixed Percent	Annual Depreciation
1	\$164,500.00	33.33%	\$ 54,827.85
2	164,500.00	44.45%	73,120.25
3	164,500.00	14.81%	24,362.45
4	164,500.00	7.41%	12,189.45
		100.00%	164,500.00

9. See table below. 11. \$28,310 13. \$118

**Study Guide and Assessment** 1-9. Definitions will vary.

**Section 20-1** 11. a. \$34.80 b. \$8.14 c. \$104.94

d. \$456.31 13. a. \$19.28 b. \$4.51 c. \$48.79

d. \$262.21 15. a. \$67.61 b. \$15.81 c. \$280.42

d. \$810.08 17. \$419.75 **Section 20-2** 19. 9.4%

21. 8.1% 23. 13.3% **Section 20-3** 25-27. See table

below. **Section 20-4** 29. \$3,800 31. \$15,200

33. \$4,250 **Section 20-5** 35. a. \$5,290 b. \$550

c. \$550 d. \$4,740 37. a. \$5,290 b. \$550 c. \$1,650

d. \$3,640 39. a. \$5,290 b. \$550 c. \$2,750 d. \$2,540

41. a. \$5,290 b. \$550 c. \$3,850 d. \$1,440 **Section**

20-6 43. a. \$86,500 b. \$17,300 c. \$17,300 d. \$69,200

45. a. \$86,500 b. \$12,283 c. \$44,115 d. \$42,385

47. a. \$86,500 b. \$8,520.25 c. \$63,188.25 d. \$23,311.75

49. a. \$86,500 b. \$7,802.30 c. \$78,905.30 d. \$7,594.70

## Chapter 21 Accounting Records

**Section 21-1** 3. \$77,000 5. \$36,250 7. \$17,450

9. Assets: \$221,797; Liabilities: \$142,257; Owner's equity:

\$79,540 11. \$17,704.22 13. \$72,958.00

**Section 21-2** 3. Total assets: \$33,000; Total liabilities:

\$12,300; Owner's equity: \$20,700 5. Total assets: \$52,500;

Bank loan: \$22,500; Total liabilities: \$27,500 7. a. Total

assets: \$99,800 b. Total liabilities: \$65,000 c. Owner's

equity: \$34,800 9. Total assets: \$80,467.50; Total liabilities:

\$51,013.20; Owner's equity: \$29,454.30; Total liabilities and

Owner's equity: \$80,467.50 11. Total assets: \$199,504,200;

Total liabilities: \$142,599,410; Owner's equity: \$56,904,790;

Total liabilities and Owner's equity: \$199,504,200 13. \$27,970

15. \$5,072,400

### Section 20-6

Item	Year					
	1	2	3	4	5	6
3. Taxi	\$3,200.00	\$ 5,120.00	\$3,072.00	\$1,843.20	\$1,843.20	\$ 921.60
5. Computers	6,960.00	11,136.00	6,681.60	4,008.96	4,008.96	2,004.48

### Section 20-6

9.

Year	Original Cost	Fixed Percent	Annual Depreciation	Accumulated Depreciation	Book Value
1	\$48,260.00	20.00%	\$ 9,652.00	\$ 9,652.00	\$38,608.00
2	48,260.00	32.00%	15,443.20	25,095.20	23,164.80
3	48,260.00	19.20%	9,265.92	34,361.12	13,898.88
4	48,260.00	11.52%	5,559.55	39,920.67	8,339.33
5	48,260.00	11.52%	5,559.55	45,480.22	2,779.78
6	48,260.00	5.76%	2,779.78	48,260.00	0
		100.00%	48,260.00		

### Study Guide and Assessment

Section 20-3

	Sq. Ft.	Base	Sec.	Taxes	Insur.	Maint.	Assoc.	Total
		12.5	0.85	1.55	0.065	2.1	0.9	
25.	3,400	\$42,500	\$2,890	\$5,270	\$221	\$7,140	\$3,060	\$61,081
27.	2,100	26,250	1,785	3,255	137	4,410	1,890	37,727

**Section 21-3** 3. \$96,600 5. \$17,950 7. \$58,127  
9. \$7,871.68 11. \$9,921.32 13. \$1,164.92 15. \$17,847.80  
17. \$16,596.26 19. \$2,853.46 21. \$95.76

**Section 21-4** 3. \$4,685 5. a. \$3,675 b. \$1,935  
c. \$1,107 7. a. \$673,642 b. \$255,726 c. \$159,307  
9. a. \$388,125 b. \$157,125 c. \$85,209 11. Net sales:  
\$3,080; Gross profit: \$3,080; Total operating expenses: \$2,209;  
Net income: \$871 13. Gross profit: \$58.3 million; Total  
operating expenses: \$38.7 million; Net income: \$19.6 million  
15. \$218,695.25 17. \$455.06

**Section 21-5** 5. 50.0% 7. 44.5% 9. a. 2.0:1.0  
b. 1.2:1.0 11. a. \$3,553 b. 46.2% 13. a. 1.6:1.0  
b. 1.3:1.0 15. 25% 17. 1.0:1.0

**Section 21-6** 3. 15.3% 5. \$23,090; 20.1%  
7. a. -\$775 b. -16.7% 9. a. \$8,943 b. 21.1%  
11. a. -\$75; -6.4% b. -\$2.2; -3.9% c. -\$5.3; -8.8%  
d. \$0.5; 1.4% e. -\$5.8; -23.4% 13. 50.0% 15. 29.6%

**Study Guide and Assessment** 1. income statement  
3. amount of change 5. assets 7. quick ratio 9. cost of  
goods sold **Section 21-1** 11. \$47,144 13. \$32,870  
15. \$96,500 **Section 21-2** 17. a. \$132,800  
b. \$113,400 c. \$19,400 19. a. \$287,954 b. \$5,600  
c. \$216,200 21. a. \$113,192 b. \$56,890 c. \$68,390  
23. a. \$181,337.10 b. \$80,500.68 c. \$81,483.89

**Section 21-3** 25. \$136,134 27. \$43,715.10  
29. \$85,114.90 **Section 21-4** 31. a. \$36,250  
b. \$27,709.80 c. \$9,209.80 33. a. \$84,009.89  
b. \$68,109.55 c. \$26,909.55 35. a. \$38,393.03  
b. \$17,183.72 c. \$752w.75 **Section 21-5** 37. a. 1.7:1  
b. 1.5:1 39. a. 2.2:1 b. 1.8:1 **Section 21-6**  
41. a. \$128,100 b. 22.8% 43. a. \$66,931 b. 61.1%  
45. a. -\$99,030 b. -3.1% 47. a. -\$77,553.64  
b. -70.2%

## Chapter 22 Financial Management

**Section 22-1** 3. \$5,511.90 5. a. \$64,823  
b. \$11,205.75 7. a. \$194,884 b. \$59,254.76  
9. \$742.35 11. 4.44 13. 12.48 15. 1,645  
17. \$12,434 19. \$58.084

**Section 22-2** 5. a. \$408,000 b. \$455,500 c. \$6,344,500  
d. \$1.14 7. a. \$1,050,000 b. \$1,104,650 c. \$19,895,350  
d. \$1.10 9. \$653,360 11. \$31,249,125; \$1.48 13. \$63,700  
15. \$44,580

**Section 22-3** 5. a. \$1,050 b. \$71,050 7. a. \$1,562.50  
b. \$39,062.50 9. a. \$1,066.67 b. \$65,066.67  
11. \$202,468.75 13. \$718,250 15. 0.127 17. 0.006  
19. 0.0005

**Section 22-4** 5. a. \$218.17 b. \$69,806.33  
7. a. \$1,762.50 b. \$148,237.50 9. a. \$1,200 b. \$58,830  
c. 6.119% 11. 139.92 13. 0.2337 = 0.234 15. 12.3333  
= 12.333 17. 24.275

**Section 22-5** 5. a. \$3,500 b. \$696,545  
c. 6.030% 7. a. \$17,625.00 b. \$1,482,375 c. 2.378%  
9. a. \$735,977.50 b. 7.64% 11. a. \$497,748.33;  
5.525% b. \$495,248.33; 5.805% c. \$492,727.50; 5.969%  
d. \$931,356.67; 6.031% 13. 0.23422 = 0.234  
15. 0.336755 = 0.337

**Section 22-6** 5. \$23,719 7. \$31,041 9. \$21,670  
11. \$3,071,356.40 13. 600.712 15. 5.361

**Study Guide and Assessment** 1. commercial  
paper 3. taxable income 5. bonds 7. commercial loan  
9. underwriting commission **Section 22-1** 11. a. \$147,629  
b. \$40,825.31 13. a. \$42,529 b. \$6,379.35  
15. a. \$240,376 b. \$76,996.64 17. a. \$242,088  
b. \$77,664.32 **Section 22-2** 19. a. \$60,200  
b. \$106,180 c. \$753,820 d. \$3.93 21. a. \$534,000  
b. \$654,000 c. \$8,246,000 d. \$3.44 23. a. \$2,189,000  
b. \$2,299,500 c. \$37,500,500 d. \$1.53 **Section 22-3**  
25. a. \$2,200.00 b. \$112,200.00 27. a. \$9,375  
b. \$259,375 29. a. \$10,006.25 b. \$810,506.25  
**Section 22-4** 31. a. \$595.83 b. \$64,434.17  
c. 5.55% 33. a. \$2,041.47 b. \$123,008.83 c. 4.98%  
35. a. \$613.86 b. \$97,446.14 c. 2.77% **Section**  
**22-5** 37. a. \$6,662.50 b. \$643,372.50 c. 6.21%  
39. a. \$18,366.67 b. \$931,663.33 c. 5.91%  
41. a. \$114,481.11 b. \$6,885,468.89 c. 7.30%  
**Section 22-6** 43. \$39,631 45. \$43,568

## Chapter 23 Corporate Planning

**Section 23-1** 5. 6.4% 7. \$154.35 9. \$1.28  
11. 9.1% 13. \$4,111.01 15. \$129,310.84 17. 0%  
19. \$76.84 21. 2,890% 23. \$0.33 25. \$16.16  
27. \$0.01 29. 1.9%

**Section 23-2** 3. a. \$118.3 million b. \$309 5. a. \$448.9  
billion b. \$6,450.13 7. a. \$2,652.3 billion b. \$1,170.83  
9. \$732,672,000 11. \$355,716,000,000; \$18,877.58  
13. \$597,921,242,000; \$20,020.27 15. \$185,425,000,000;  
\$23,694.53 17. a. France: \$1,223,183,622,000 b. U.K.:  
\$987,252,000,000 c. France: \$21,069.37 d. U.K.: \$18,099.07  
19. \$5,003.88 21. \$125,875.67

**Section 23-3** 3. 180.5 5. \$521.63 7. \$364.98  
9. 177.8 11. \$354.33 13. \$26,311.72 15. \$166.29  
17. \$112.47 19. 3.0 21. 0.4 23. \$59,409.95

**Section 23-4** 9. a. \$20,000 b. -\$5,000  
11. a. \$60,200 b. \$3,800 13. a. \$3,763,200  
b. -\$201,200 15. Sales: \$105,000; services: \$30,000;  
investments: \$15,000 17. Sales: -\$40,000; services:  
-\$30,000; investments: \$10,000; total: -\$60,000 19. Sales:  
\$14,610,240; trading profits: \$304,380; other: \$304,380  
21.

	Actual	Budget	Allocation	Difference
Apples	\$420,000	\$408,000		\$+12,000
Strawberries	91,320	136,000		-44,680
Blueberries	91,340	102,000		-10,660
Cherries	39,900	34,000		+5,900
Total	\$642,560	\$680,000		\$-37,440

23. \$272,196.60 25. \$1,089,499.88 27. \$3,155,178.64

**Study Guide and Assessment** 1. inflation  
3. budget 5. consumer price index **Section 23-1**  
7. 10.5% 9. \$1,330.64 11. \$976.61 **Section 23-2**  
13. a. \$315,042,200 b. \$5.10 15. a. \$485,616,600,000  
b. \$198.22 17. a. \$6,119,040,875 b. \$4.37 **Section**  
**23-3** 19. 290.35 21. \$16,166.72 23. \$6.11 **Section**  
**23-4** 25. a. \$29,430 b. \$21,070 27. a. \$152,519.40  
b. -\$30,554.40 29. a. \$540,954 b. -\$105,554

**Cumulative Test Prep** 1. C 3. D 5. D 7. A  
9. \$28,700 ordinary interest or \$28,690.41 exact interest

11. \$47,575 13. 300.5 15. Answers will vary but might mention that it rewards people for being married and having children. 17. Answers will vary but might mention that a balance sheet shows the financial position of a company on a certain date. An income statement shows a company's income and operating expenses in detail.

### Skills Answers

**Skill 1** 1. Ones; 5 3. Tens; 70 5. Ones; 8 7. Tens; 0 9. Hundreds; 700 11. Ones; 9 13. Tenths; 0.3 15. Thousandths; 0.009 17. Hundredths; 0.02 19. Ones; 4 21. Hundredths; 0.02 23. Thousandths; 0.007 25. Thousandths; 0.003 27. Thousandths; 0.001 29. Thirty-four 31. Seventy-eight 33. Eight hundred forty-two 35. Five thousand twelve 37. One hundred nineteen 39. One thousand two hundred forty 41. One hundred ninety-four 43. Twenty-five and  $\frac{00}{100}$  dollars 45. Seventeen and  $\frac{9}{100}$  dollars 47. One hundred twenty and  $\frac{17}{100}$  dollars 49. Seven thousand seven hundred forty-nine dollars 51.  $\frac{50}{100}$  dollars or fifty cents 53. \$71.64 million 55. 18.4 thousand 57. 171.6 thousand 59. 2.135 billion 61. \$3,400,000 63. \$11,200,000,000 65. 7,300,000,000 67. 400,000 69. \$720,000,000 71. 54 73. 835 75. 211 77. 5,763 79. 4,444 81. 1,236 83. 650 85. \$101 87. \$93 89. \$742 91. \$791,000 93. 2.0 95. 25.1 97. 58 99. 0.1 101. 0.5 103. 0.020 105. \$10 107. \$19 109. \$600 111. \$9,521.39 113. \$2,000.00

**Skill 2** 1. 30 3. 70 5. 220 7. 8,100 9. 600 11. 6,000 13. 16,000 15. 1,000 17. 0.1 19. 0.5 21. 0.47 23. 0.36 25. 0.601 27. 0.213 29. 137.492 31. 38,000 33. 48,000 35. 900 37. 30 39. 580 41. 36 43. 189.7 45. 0.1 47. 152.43 49. 0.179 51. 108.437

**Skill 3** 1. 106 3. 138 5. 1,189 7. 799 9. 897 11. 488 13. 10,878 15. 8,987 17. 71 19. 210 21. 897 23. 1,542 25. 4,638 27. 12,224 29. 12,201 31. 12,787 33. 3,798 35. 12,318 37. 8,152 39. 9,484 41. 6,777 43. 14,953 45. 33,587 47. 87,481 49. 14,999 51. 14,450

**Skill 4** 1. 331 3. 151 5. 3,442 7. 3,311 9. 1,111 11. 8,020 13. 6 15. 6,231 17. 64 19. 99 21. 2,258 23. 1,166 25. 1,909 27. 3,667 29. 1,275 31. 859 33. 2,983 35. 1,568 37. 9,111 39. 1,862 41. 2,238 43. 2,901 45. 16,526 47. 37,503 49. 126,403 51. 100,621

**Skill 5** 1. 1,406.20 3. 713.39 5. 900.05 7. 2,411.356 9. 1,719.002 11. 98.03 13. 1,300.840 15. 1,044.00 17. 91.111 19. 156.254 21. 19.999 23. 1,126.030 25. 1,083.557 27. 508.595 29. 1.000 31. 147.420 33. 787.032 35. 1,191.418

**Skill 6** 1. 51.15 3. 134.89 5. 5.09 7. 25.51 9. 79.68 11. 203.84 13. 70.85 15. 84.32 17. 19.6 19. 8.07 21. 57.44 23. 377.63 25. 5.09 27. 19.983 29. 325.86 31. 204.354 33. 557.87 35. 5,215.946 37. 1.1178 39. 778.029 41. 3.59806 43. 2.74502

**Skill 7** 1. 1,533 3. 87,344 5. 100,152 7. 77,256 9. 959,373 11. 2,808 13. 251,565 15. 4,268,236 17. 1,665 19. 310,992 21. 1,662,024 23. 69,000 25. 28,182 27. 357,000 29. 36,060,000 31. 4,471,392

33. 43,955,000 35. 1,070,443 37. 169,130 39. 623,770 41. 1,309,622 43. 2,804,972 45. 15,805,077

**Skill 8** 1. 4.5 3. 878.22 5. 188.55 7. 230.8218 9. 43.9556 11. 287.352 13. 0.1008 15. 0.096 17. 0.584 19. 0.6156 21. 0.0567 23. 0.0861 25. 4,116 27. 36 29. 876.403 31. 1,212.86 33. 112.5 35. 81.9698 37. 161,713.902 39. 0.156462 41. 84 43. 0.07608533

**Skill 9** 1.  $2\frac{1}{3}$  3.  $2\frac{2}{41}$  5.  $14\frac{12}{53}$  7.  $84\frac{17}{21}$  9.  $67\frac{19}{43}$  11.  $59\frac{12}{23}$  13.  $71\frac{42}{81}$  15.  $16\frac{13}{114}$  17.  $15\frac{17}{321}$  19.  $8\frac{792}{892}$  21.  $23\frac{22}{409}$  23.  $14\frac{2}{625}$  25.  $20\frac{831}{843}$  27. 18 29. 16 31. 72 33.  $14\frac{22}{621}$  35.  $12\frac{349}{549}$  37.  $5\frac{765}{842}$  39.  $181\frac{29}{473}$  41.  $87\frac{527}{622}$  43.  $1,600\frac{3}{51}$  45.  $252\frac{46}{88}$  47.  $208\frac{166}{417}$  49.  $1,345\frac{177}{514}$

**Skill 10** 1. 11.125 3. 21.2 5. 5.1 7. 19.75 9. 34.5 11. 22.8 13. 16.1 15. 206.8 17. 2.02 19. 10.865 21. 21.524 23. 8.71 25. 10.45 27. 31.13 29. 5.63 31. 17.5 33. 14.44 35. 230.05 37. 41.42 39. 25.54 41. 39.5

**Skill 11** 1. 4.6 3. 5.71 5. 17 7. 6.5 9. 42.91 11. 26 13. 31 15. 26 17. 8.96 19. 13.21 21. 1.41 23. 245 25. 1.21 27. 256 29. 67.48 31. 22.57 33. 1.75 35. 38.5 37. 98.86 39. 0.01 41. 17.13 43. 0.01

**Skill 12** 1. 10 3. 50 5. 24 7. 22 9. 51 11. 24 13. 35 15. 72 17. 20 19.  $\frac{2}{3}$  21.  $\frac{1}{2}$  23.  $\frac{2}{3}$  25.  $\frac{1}{3}$  27.  $\frac{5}{6}$  29.  $\frac{10}{27}$  31.  $\frac{4}{7}$  33.  $\frac{1}{2}$  35.  $\frac{3}{4}$  37.  $\frac{94}{183}$  39.  $\frac{1}{2}$  41.  $\frac{19}{36}$  43.  $\frac{2}{13}$  45.  $\frac{4}{25}$

**Skill 13** 1.  $\frac{25}{4}$  3.  $\frac{59}{8}$  5.  $\frac{20}{3}$  7.  $\frac{39}{5}$  9.  $\frac{43}{10}$  11.  $\frac{135}{32}$  13.  $\frac{16}{3}$  15.  $\frac{29}{10}$  17.  $\frac{53}{16}$  19.  $\frac{165}{32}$  21.  $\frac{79}{11}$  23.  $\frac{57}{5}$  25.  $6\frac{1}{2}$  27.  $5\frac{3}{4}$  29.  $5\frac{1}{2}$  31.  $2\frac{1}{3}$  33.  $2\frac{1}{2}$  35.  $2\frac{20}{21}$  37.  $5\frac{5}{6}$  39.  $3\frac{1}{6}$  41.  $6\frac{1}{8}$  43.  $6\frac{3}{7}$

**Skill 14** 1. 0.8 3. 1.13 5. 2.43 7. 1.37 9. 0.3 11. 4.38 13. 3.08 15. 0.03 17. 5.15 19. 2.12 21. 7.14 23. 0.44 25.  $\frac{1}{10}$  27.  $\frac{3}{10}$  29.  $\frac{3}{100}$  31.  $\frac{53}{100}$  33.  $\frac{3}{1,000}$  35.  $\frac{8}{125}$  37.  $\frac{4111}{250}$  39.  $\frac{469}{625}$  41.  $7\frac{1}{2}$  43.  $1\frac{2}{25}$  45.  $2\frac{83}{100}$  47.  $\frac{21}{200}$  49.  $\frac{1}{2,000}$  51.  $\frac{1,402}{625}$  53.  $\frac{1}{5,000}$

**Skill 15** 1.  $1\frac{2}{5}$  3.  $\frac{3}{4}$  5.  $1\frac{4}{7}$  7.  $1\frac{4}{25}$  9.  $1\frac{5}{16}$  11.  $1\frac{8}{45}$  13.  $11\frac{2}{3}$  15.  $14\frac{2}{7}$  17.  $12\frac{1}{3}$  19.  $17\frac{1}{4}$  21.  $9\frac{8}{5}$  23.  $11\frac{2}{5}$

**Skill 16** 1.  $1\frac{1}{10}$  3.  $\frac{20}{21}$  5.  $1\frac{1}{6}$  7.  $1\frac{13}{110}$  9.  $\frac{59}{60}$  11.  $\frac{71}{150}$  13.  $9\frac{1}{6}$  15.  $16\frac{1}{3}$  17.  $20\frac{19}{26}$  19.  $28\frac{22}{63}$  21.  $28\frac{43}{56}$  23.  $29\frac{5}{48}$

**Skill 17** 1.  $\frac{2}{9}$  3.  $\frac{5}{6}$  5.  $\frac{4}{7}$  7.  $\frac{1}{8}$  9.  $\frac{1}{5}$  11.  $\frac{2}{5}$  13.  $\frac{1}{4}$  15.  $\frac{7}{20}$  17.  $1\frac{1}{7}$  19.  $3\frac{1}{4}$  21.  $2\frac{1}{6}$  23.  $5\frac{3}{16}$  25.  $2\frac{7}{13}$  27.  $8\frac{1}{2}$  29.  $25\frac{2}{7}$

**Skill 18** 1.  $\frac{3}{8}$  3.  $\frac{3}{20}$  5.  $\frac{1}{18}$  7.  $\frac{1}{15}$  9.  $\frac{3}{20}$  11.  $\frac{1}{10}$  13.  $4\frac{1}{4}$  15.  $6\frac{5}{18}$  17.  $5\frac{7}{60}$  19.  $3\frac{1}{8}$  21.  $2\frac{3}{20}$  23.  $2\frac{1}{8}$

**Skill 19** 1.  $1\frac{1}{2}$  3.  $2\frac{1}{10}$  5.  $2\frac{6}{11}$  7.  $3\frac{1}{18}$  9.  $12\frac{11}{12}$  11.  $13\frac{7}{70}$  13.  $2\frac{7}{8}$  15.  $1\frac{3}{8}$  17.  $\frac{1}{8}$  19.  $3\frac{7}{9}$  21.  $\frac{9}{20}$  23.  $11\frac{5}{16}$  25.  $14\frac{7}{7}$  27.  $13\frac{5}{7}$  29.  $12\frac{5}{32}$

**Skill 20** 1.  $\frac{1}{3}$  3.  $\frac{5}{8}$  5.  $\frac{5}{12}$  7. 2 9. 9 11.  $16\frac{2}{15}$  13.  $58\frac{1}{3}$  15.  $46\frac{1}{8}$  17.  $\frac{1}{6}$  19.  $4\frac{1}{8}$  21. 6 23.  $3\frac{3}{4}$  25.  $19\frac{1}{2}$  27.  $8\frac{8}{15}$  29. 64 31.  $25\frac{29}{72}$  33.  $97\frac{11}{12}$  35.  $71\frac{1}{24}$

**Skill 21** 1. 2 3.  $1\frac{7}{8}$  5.  $7\frac{1}{2}$  7. 6 9. 16 11.  $3\frac{7}{36}$  13.  $2\frac{11}{12}$  15.  $\frac{1}{4}$  17.  $5\frac{5}{33}$  19.  $4\frac{40}{323}$  21.  $1\frac{1}{2}$  23.  $1\frac{1}{2}$  25.  $\frac{2}{3}$  27. 15 29. 6 31. 30 33.  $\frac{43}{176}$  35.  $\frac{143}{375}$  37.  $6\frac{1}{2}$  39. 1

**Skill 22** 1. 1,500:600 3. 600:1,200 5. 600:1,500 7.  $\frac{1}{5}$   
9.  $\frac{1}{15}$  11.  $\frac{1}{25}$  13.  $\frac{2}{5}$

**Skill 23** 1. T 3. F 5. F 7. T 9. T 11. F 13. 18  
15.  $7\frac{1}{3}$  17.  $\frac{6}{11}$  19.  $5\frac{5}{9}$  21.  $12\frac{4}{13}$  23. 20 25. 5 27. 24  
29. 64 31. 15 33. 50

**Skill 24** 1. 5 oranges/\$0.99 = 7 oranges/ $n$  3. 5 cm/40 kilometers = 17 cm/ $n$  5. \$4.35 7. 117 pp. 9. 1,485 wheels  
11. \$28.00 13.  $33\frac{1}{2}$  minutes

**Skill 25** 1. 288 3. 80 5. 64; 640 7. A 9. B 11. B

**Skill 26** 1. 10% 3. 25% 5. 82% 7. 213%  
9. 575.3% 11. 39.1% 13. 1,210.4% 15. 1,082%

17. 10.6% 19. 4% 21. 50.3% 23. 70% 25. 710%

27. 1,050% 29. 1,260% 31. 2,250% 33. 3,720%

35. 750% 37. 1,630% 39. 620% 41. 380%

43. 67% 45. 880% 47. 32% 49. 300.3% 51. 21.87%

53. 2,500% 55. 14% 57. 51% 59. 186.8% 61. 0.3%

63. 26% 65. 0.32% 67. 29% 69. 342% 71. 210%

73. 167% 75. 250% 77. 207.7% 79. 19%

**Skill 27** 1. 25% 3. 75% 5. 12.5% 7. 35% 9. 14%

11. 62.5% 13. 275% 15. 666.7% 17. 855.6%

19. 817.5% 21. 722% 23. 537.5% 25. 58.3%

27. 1,530% 29. 2,080% 31. 1,862.5% 33. 93.8%

35. 1,135.7% 37. 77.8% 39. 573.3% 41. 1,735%

**Skill 28** 1. 0.105 3. 0.40 5. 1.20 7. 0.067 9. 0.089

11. 1.19 13. 0.172 15. 1.00 17. 0.053 19. 0.007

21. 0.00625 23. 0.056 25. 0.068 27. 0.306 29. 0.5784

31. 0.7425 33. 0.1880 35. 0.1445 37. 0.00125

39. 0.0014 41. 0.0879 43. 0.0095 45. 0.00025

47. 0.225 49. 0.252

**Skill 29** 1.  $\frac{9}{20}$  3.  $1\frac{3}{4}$  5.  $\frac{117}{1,000}$  7.  $\frac{3}{2,000}$  9.  $\frac{53}{500}$

11.  $\frac{3,763}{10,000}$  13.  $\frac{1}{2}$  15.  $\frac{101}{1,000}$  17.  $\frac{809}{1,000}$  19.  $\frac{1}{16}$  21.  $\frac{7}{16}$

23.  $\frac{1}{400}$  25.  $\frac{31}{200}$  27.  $\frac{51}{200}$  29.  $\frac{1}{6}$  31.  $\frac{3}{10}$  33.  $\frac{5}{16}$  35.  $\frac{1}{8}$

37.  $\frac{4}{15}$  39.  $\frac{1}{9}$  41.  $\frac{1}{2}$  43.  $\frac{51}{80}$  45.  $\frac{51}{400}$  47.  $\frac{43}{800}$  49.  $\frac{1}{15}$

**Skill 30** 1. 9 3. 3.84 5. 7.8 7. 14.24 9. 3.486

11. 45.359 13. 10 15. 40 17. 6 19. 2.25 21. 128

23. 8.19 25. 15 27. 2 29. 80 31. 9.144 33. 25

35. 6.375

**Skill 31** 1. 50% 3. 20% 5. 35.7% 7. 89.2% 9. 69.9%

11. 87.2% 13. 150% 15. 120% 17. 133.3% 19. 129.2%

21. 400% 23. 513.3% 25. 80% 27. 46.2% 29. 55.1%

31. 80% 33. 120% 35. 25% 37. 138.9% 39. 200%

41. 66.7% 43. 5% 45. 146.7%

**Skill 32** 1. 72 3. 8,048.5 5. 1,600 7. 336.4 9. 60

11. 134 13. 160 15. 60 17.  $90\frac{2}{3}$  19.  $54\frac{86}{91}$  21. 75

23. 2.5 25. 52.5 27. 78 29. 180 31. 225 33. 55

35.  $197\frac{1}{67}$

## Applications Answers

**Application A** 1. 600 mi 3. 448 in 5. 210 m 7. 1,216 sq ft 9. 360 sq km 11. 31.4 13. 23.4 15. \$437.95

17. \$1,429.00 19. \$5.25 21. \$46.19 23. \$50.16

**Application B** 1. 308 in 3. 8,775 yd 5. 8 h 7. 30 s

9. 30 11. 248 13. 20 15. 50

**Application C** 1. \$1,200,000 3. \$7,900,000 5. Bronx, Columbus, Dallas, Lincoln, San Diego 7. Express Plus

9. a. Express b. Mon.

**Application D** 1. 1 quarter, 1 dollar, 1 \$5 bill 3. 1 penny, 3 dollars, 1 \$5 bill 5. 2 pennies, 1 dime, 1 quarter, 4 dollars

7. 2 dimes, 3 quarters, 4 dollars 9. 1 penny, 2 dimes, 2 quarters

11. 1 quarter, 2 dollars 13. 1 dime, 1 dollar, 1 \$5 bill

15. 1 quarter, 2 dollars 17. 2 quarters, 1 dollar, 1 \$10 bill

**Application E** 1. 8:45 3. 7:00 5. 11:15 7. 12:15

9. 3:30 11. 8:45 13. 7:30 15. 9:45 17. 12:45

19. 6:00 21. 11:30 23. 10:15

**Application F** 1. 2 h:46 min 3. 3 h:15 min 5. 51 min

7. 5 h:15 min 9. 8 h:20 min 11. 10 h:45 min

**Application G** 1. 137 days 3. 212 days 5. 258 days

**Application H** 1. No 3. Yes 5. No 7. Yes 9. Yes

11. Yes

**Application I** 1. 79 days 3. 231 days 5. 222 days

**Application J** 1.  $\frac{3}{4}$  yr 3. 1 yr 5. 3 yr 7.  $1\frac{3}{4}$  yr

9.  $1\frac{1}{6}$  yr 11.  $\frac{5}{6}$  yr 13.  $\frac{35}{73}$  yr 15.  $\frac{50}{73}$  yr

**Application K** 1. 52 3. 16 5. 12 7. 6 9. 60

**Application L** 1. 0.85 3. 0.65 5. 0.20 7. 9%

9. 53% 11. 93% 13. 96.5% 15. 24.1%

**Application M** 1. \$11.00 3. \$13.00 5. About \$4.00

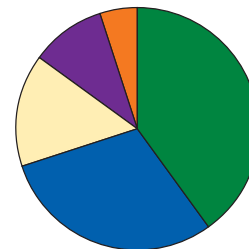
**Application N** 1. \$8,000 3. October and November

**Application O** 1. 45 hours 3. 2.5 hours

**Application P** 1. \$1,360 3. \$480

5.

	Percent	Degrees
Food	40%	144
Rent	30%	108
Entertainment	15%	54
Clothing etc.	10%	36
Other	5%	18
	100%	360



■ Clothing etc.    ■ Rent  
■ Entertainment    ■ Food  
■ Other

**Application Q** 1. 54.3 3. 6,726.75 5. \$1,235,563

**Application R** 1. 148.5 3. 88 5. 0.09 7. 2.08

**Application S** 1. \$24 3. None 5. 0.01

**Application T** 1. meter 3. millimeter 5. meter

7. centimeter

**Application U** 1. kilogram 3. gram 5. metric ton

7. kiloliter 9. gram

**Application V** 1. 10.5 cm 3. 2.6 ft 5. 162 mi

**Application W** 1. 12.56 mi 3. 2.5 m 5. 4.71 ft

7. 56.52 ft 9. 39.25 mi

**Application X** 1. 150 in<sup>2</sup> 3. 0.675 m<sup>2</sup> 5. 10.11 ft<sup>2</sup>

**Application Y** 1. 13.5 in<sup>2</sup> 3. 200 m<sup>2</sup> 5. 19.625 yd<sup>2</sup>

7. 23,223 mm<sup>2</sup>

**Application Z** 1. 50,688 m<sup>3</sup> 3. 396 cm<sup>3</sup> 5.  $157\frac{1}{4}$  yd<sup>3</sup>

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