

1-1 Calculating Straight-Time Pay

Straight-time pay is the total amount of money you earn in a given pay period. It is calculated based upon your hourly rate of pay. To determine your straight-time pay, multiply the number of hours you worked by your hourly rate.

Straight-Time Pay = Hourly Rate × Hours Worked

Examples

Find the straight-time pay.

Example 1 35 hours worked at \$7.75 per hour.

Hourly Rate	×	Hours Worked	=	Straight-Time Pay
\$7.75	×	35	=	\$271.25

Example 2 $36\frac{3}{4}$ hours worked at \$8.775 per hour.

	Hourly Rate	×	Hours Worked	=	Straight-Time Pay
	\$8.775	×	36.75	=	\$322.481
Calculator:	\$8.775	×	36.75	=	\$322.48125

Practice

Find the straight-time pay. Round answers to the thousandth of a dollar.

- \$11.625 per hour × 30 hours
- \$7.825 per hour × 32.125 hours

Find the straight-time pay. Round answers to the nearest cent.

- \$9.40 per hour × 22 hours
- \$10.25 per hour × 25 hours
- \$8.50 per hour × $30\frac{1}{2}$ hours
- \$12.75 per hour × $24\frac{3}{4}$ hours
- The local bowling alley pays you \$7.25 per hour to manage the desk. Last week you worked 16 hours. What is your straight-time pay?
- Your neighbor has agreed to pay you \$8.00 per hour if you will tutor her son in reading. If you spend $9\frac{1}{2}$ hours each week helping him, how much straight-time pay will you earn each week?
- Ronald Sutter, an assembly line worker, earns \$16.655 per hour. He typically works 36.225 hours per week. What is his usual straight-time pay?
- Standardized Test Practice** Keys Per Minute recently hired Anne Bradford as a data entry clerk. Her starting rate of pay is \$7.50 per hour and will increase to \$8.00 per hour after 90 days. If her standard work week is 32 hours, what will her straight-time pay be 4 months from now?
A. \$240 B. \$250 C. \$256 D. \$248

1-2

Calculating Overtime Pay

Overtime pay is the amount of money you earn when you work more than your regularly scheduled hours. If you are paid $1\frac{1}{2}$ times your regular rate, it is called **time and a half**. If you are paid twice your regular rate, you earn **double time**. Your *total pay* (or *gross pay*) is calculated by adding your overtime pay to your straight-time pay.

Overtime Pay = Overtime Rate × Overtime Hours Worked

Total Pay (Gross Pay) = Straight-Time Pay + Overtime Pay

Example

Find the total pay.

Anita Juarez earns \$9.50 for a regular 40-hour work week. Her overtime rate is $1\frac{1}{2}$ times her regular rate. Last week she worked 8 hours of overtime in addition to her regular 40 hours. What was her total pay?

- | | |
|--|--|
| <p>1. Find her straight-time pay.
 Hourly Rate × Regular Hours Worked
 $\\$9.50 \times 40 \text{ hours} = \\$380.00 \text{ straight-time pay}$</p> <p>2. Find her overtime pay.
 Overtime Rate × Overtime Hours Worked
 $(1.5 \times \\$9.50) \times 8 \text{ hours}$
 $\\$14.25 \times 8 \text{ hours} = \\$114.00 \text{ overtime pay}$</p> | <p>3. Find her total pay.
 Straight-Time Pay + Overtime Pay
 $\\$380.00 + \\$114.00 = \\$494.00 \text{ total pay}$</p> |
|--|--|

Practice

Find the total pay.

	Hourly Pay (40 hrs)	Straight-Time Pay	Overtime Rate	Overtime Hours	Overtime Pay	Total Pay
1.	\$7.25		2	12		
2.	\$9.80		$1\frac{1}{2}$	8		
3.	\$12.465		2	5.5		

4. Michael Sears' standard work week is 35 hours at a rate of \$8.675 per hour. He earns time and a half for weekend hours. This week he worked 3 extra hours on Saturday and 4 on Sunday. What is his total pay for the week?
5. **Standardized Test Practice** Piping Hot Pizza's busiest days fall on the weekend. It offers its employees time-and-a-half pay on Saturdays and double-time pay on Sundays. Lisa Edwards normally earns \$10.50 per hour. If, in addition to her regular 25 hours, she works 4 hours on Saturday and 6 hours on Sunday, what is her total pay for the week?
- A. \$367.50 B. \$451.50 C. \$420.00 D. \$472.50

1-3 Calculating a Weekly Time Card

A **weekly time card** gives a day-by-day record of your work hours. It shows the exact time you reported to work and the exact time you left each day. To calculate your weekly hours, you must first compute the hours you work each day; then add them together for the entire week. Round the hours worked each day to the nearest quarter hour.

Total Hours = Sum of Daily Hours

Example

Find the total hours worked.

Day of Week	Time In	Time Out	Time In	Time Out
Monday	8:45 A.M.	11:45 A.M.	12:45 P.M.	4:15 P.M.
Tuesday	8:05 A.M.	12:05 P.M.	1:05 P.M.	5:14 P.M.
Wednesday	8:12 A.M.	12:12 A.M.	1:12 P.M.	4:48 P.M.
Thursday	7:59 A.M.	11:59 A.M.	12:59 P.M.	5:02 P.M.
Friday	1:12 P.M.	—	—	5:25 P.M.

- Find the hours worked on Monday.
 Time between 8:45 A.M. and 11:45 A.M.
 $11:45 - 8:45 = 3\text{h}:00\text{min}$
 Time between 12:45 P.M. and 4:15 P.M.
 $(4:15 + 12:00) - 12:45$
 $16:15 - 12:45 = 3\text{h}:30\text{min}$
 $3\text{h}:00\text{min} + 3\text{h}:30\text{min} = 6\text{h}:30\text{min}$
 Rounded to nearest quarter hour = $6\frac{1}{2}$ hours
- Find the hours worked on each day, Tuesday to Friday.
 Daily hours: Tuesday $8\frac{1}{4}$ hours,
 Wednesday $7\frac{1}{2}$ hours, Thursday 8 hours,
 Friday $4\frac{1}{4}$ hours
- Find the total hours.
Total Hours = Sum of Daily Hours
 $6\frac{1}{2} + 8\frac{1}{4} + 7\frac{1}{2} + 8 + 4\frac{1}{4} = 34\frac{1}{2}$ total hours

Practice

Find the hours worked each day and the total hours for the week.

	Day of Week	Time In	Time Out	Time In	Time Out	Hours
1.	Monday	9:15 A.M.	12:15 A.M.	1:15 P.M.	5:58 P.M.	
2.	Tuesday	9:02 A.M.	12:00 P.M.	1:00 P.M.	5:36 P.M.	
3.	Wednesday	8:58 A.M.	12:00 P.M.	1:00 P.M.	5:05 P.M.	
4.	Thursday	8:27 A.M.	12:30 P.M.	1:30 P.M.	6:02 P.M.	
5.	Friday	2:04 P.M.	—	—	5:45 P.M.	
6.	Total Hours for Week					

- Standardized Test Practice** Amanda Roberts works a Monday through Friday work week at a rate of \$8.75 per hour. She takes a 1-hour lunch break. If she clocks in each day at 8:45 A.M. and leaves at 5:15 P.M., what is her total pay for the week?
 A. \$328.13 B. \$65.63 C. \$229.69 D. \$350.00

1-4

Calculating Pay on a Piecework Basis

Sometimes a person’s take-home pay is calculated on a **piecework** basis. This means that instead of being paid an hourly rate, you are paid a fixed amount of money for each item of work you complete.

Total Pay = Rate per Item × Number of Items Produced

Example

Find the total pay.

Juan Santiago works for Sports Cards Plus. For each autographed card he hand numbers, he is paid \$0.02. He is paid an additional \$0.03 for each corresponding certificate of authenticity he completes. If he completes 1,200 cards with certificates of authenticity and an additional 1,500 cards without certificates of authenticity, what is his total pay for the day?

- Rate for cards with certificates: $\$0.02 + \$0.03 = \$0.05$
Rate for cards without certificates: \$0.02

	Rate per Item	×	Number of Items Produced	=	Total Pay
Card w/ COAs	\$0.05	×	1,200	=	\$60.00
Cards w/o COAs	0.02	×	1,500	=	30.00

- $\$60.00 + \$30.00 = \$90.00$ total pay

Practice

Find the total pay.

	Employee	Rate per Item	×	Number of Items Produced	=	Total Pay
1.	Bates, L.	\$ 0.75	×	1,100	=	
2.	Connors, D.	2.30	×	115	=	
3.	Gress, T.	8.45	×	55	=	
4.	Jones, M.	0.44	×	660	=	
5.	Lopez, F.	5.00	×	99	=	
6.	Wu, K.	10.95	×	42	=	

- Standardized Test Practice** Kathy Crawford works as a freelance writer and editor. She charges \$12 per page for editing services and \$0.15 per word for writing. Kathy’s regular client has asked her to write a 500-word press release and edit a 12-page newsletter. What is the total pay for the job?
A. \$144 B. \$219 C. \$75 D. \$200

1-5 Calculating Salary

When you are paid a fixed amount of money on a regular basis, you earn what is known as a **salary**. The total amount of money you earn in a year is your annual salary. Your salary can be paid in the following ways:

- Weekly** (52 pay periods per year)
- Biweekly** (26 pay periods per year)
- Semimonthly** (24 pay periods per year)
- Monthly** (12 pay periods per year)

$$\text{Salary per Pay Period} = \frac{\text{Annual Salary}}{\text{Number of Pay Periods per Year}}$$

Example

Find the weekly salary and monthly salary.

County Medical Center advertised an RN position at a starting yearly salary of \$42,000.00.

1. Weekly Salary = Annual Salary ÷ 52
 Weekly Salary = \$42,000.00 ÷ 52 = **\$807.69**
2. Monthly Salary = Annual Salary ÷ 12
 Monthly Salary = \$42,000.00 ÷ 12 = **\$3,500.00**

Practice

Determine the number of pay periods per year, then find the salary per pay period.

	Employee	Pay Period	Annual Salary	Pay Periods per Year	=	Salary per Pay Period
1.	Warner, C.	Biweekly	\$26,000		=	
2.	Allen, V.	Weekly	14,750		=	
3.	Bénés, N.	Semimonthly	32,500		=	
4.	Vincent, F.	Monthly	56,000		=	
5.	Potter, D.	Weekly	41,875		=	
6.	Clark, B.	Semimonthly	89,675		=	

7. Sam Stevens, a mechanical engineer, earns an annual salary of \$74,500. What is his biweekly salary?
8. Wanda Summers teaches 10th grade English. If she is paid a weekly salary of \$750.00, what is her annual salary?
9. Fred Walters used to make a semimonthly salary of \$2,500. The company he works for is under new management, which pays its employees biweekly. What is his annual salary and what will his new biweekly salary be?
10. **Standardized Test Practice** Linda Stevens was recently promoted from Accounts Payable Clerk to Accounting Specialist. Previously, she earned \$10.50 per hour for a standard 40-hour week. She will now be paid a biweekly salary of \$1,100. How much more will Linda earn annually in her new position?
A. \$6,760 B. \$4,560 C. \$3,380 D. \$13,520

1-6

Calculating Commissions

If you work in the retail business, you might earn a **commission**. With a commission, you are paid according to how much you actually sell. You might be paid a commission only, or you might be guaranteed a minimum salary. In that case, your commission for the pay period is compared to your minimum salary. Your gross pay is the *greater* of the two.

Commission = Total Sales × Commission Rate

Gross Pay = Salary or Commission (whichever is greater)

Example

Find the gross pay.

Sandra Powers works in a clothing boutique. She is guaranteed a minimum weekly salary of \$320, or 6.5 percent of her sales, whichever is greater. If she sold \$5,000 worth of clothing and accessories last week, what is her gross pay?

1. Find her commission.
 $\$5,000.00 \times 0.065 = \mathbf{\$325 \text{ commission}}$
2. Find her gross pay.
 Salary = \$320
 $\$325 > \320 .
Gross pay is \$325.

Practice

Find the commission.

	Sales Position	Total Sales	×	Commission Rate	=	Commission
1.	Cosmetics	\$2,500	×	12%	=	
2.	Hardware	5,800	×	5½%	=	
3.	Shoes	9,750	×	3¾%	=	

Find the commission and gross pay.

	Salesperson	Minimum Weekly Salary	Total Weekly Sales	×	Commission Rate	=	Weekly Commission	Gross Pay
4.	B. Adams	\$ 500	\$ 5,200	×	8.45%	=		
5.	K. Brown	775	12,000	×	6.825%	=		
6.	C. Sumner	1,150	9,500	×	13.5%	=		

7. **Standardized Test Practice** Richard Klein works as an auto mechanic and earns the following commission rates: 3.00 percent for oil changes, 5.00 percent for tune-ups, and 6.25 percent on auto parts sales. He is guaranteed a minimum salary of \$2,450.00 per month. Last month he brought in \$2,500.00 in oil changes, \$4,500.00 in tune-ups, and sold \$28,200.00 in parts. What is his gross pay for the month?

- A. \$2,112.50 B. \$2,450.00 C. \$2,200.00 D. \$5,016.00

2-1

Federal Income Tax (FIT)

The Internal Revenue Service requires your employer to withhold a specified amount from your paycheck for **federal income tax** purposes. The government uses this money to support its various services and agencies. Tax tables provide the exact amount that should be deducted from your paycheck based on your income, your marital status, and your **withholding allowances**, which are exemptions you claim based on the number of people you support.

Example

Find the federal income tax withheld.

Mariano Denunzio is single and claims 1 exemption for himself. If his gross pay for the week is \$512.50, what amount will be withheld from Denunzio's paycheck for federal income tax?

1. Find his income range on the Single Persons tax table (see page 170). Denunzio earns between \$510 and \$520.
2. Find the column for 1 allowance.
3. Amount of federal income tax withheld is \$54.

Practice

Using the Single Persons—Weekly table (see page 170), find the amount withheld for federal income tax.

1. Weekly income: \$478.77; 4 allowances.
2. Weekly income: \$394.74; 1 allowance.

Using the Married Persons—Weekly table (see page 172), find the amount withheld for federal income tax.

3. Weekly income: \$615.88; 3 allowances.
4. Weekly income: \$521.37; 2 allowances.

Use the Weekly Payroll Period tax tables on pages 170–173 to solve the problems.

5. Sal Carpenter is married, earns \$428.95 per week, and claims 2 allowances—1 for himself and 1 for his wife. Find the amount withheld for federal income tax.
6. Jacinda Maris is a single mother who claims 3 allowances—1 for herself and 1 for each of her two children. She earns \$491.00 per week. Find the amount withheld from her paycheck for federal income tax.
7. Sandra Brown is married. Last year she claimed 2 allowances, but since her husband now claims her on his paycheck, she claims none. If her gross weekly income is \$338.79, how much more is withheld from her weekly paycheck by claiming no allowances?
8. **Standardized Test Practice** Lucinda Marks is single and earns \$177.50 per week. She can claim 1 allowance, but likes to get a large tax refund at the end of the year, so she opts instead to claim no allowances. What is the amount withheld from her paycheck for federal income tax?
A. \$12 B. \$13 C. \$7 D. \$6

2-2

Computing State Income Tax

In addition to federal taxes, most states require a specified amount to be withheld from your paycheck for state income tax purposes. This amount might be a certain percentage of your taxable wages, which depends on the number of **personal exemptions** (or withholding allowances) you claim to support your family.

$$\text{Taxable Wages} = \text{Annual Gross Pay} - \text{Personal Exemptions}$$

$$\text{Annual Tax Withheld} = \text{Taxable Wages} \times \text{Tax Rate}$$

Example

Find the state income tax withheld.

Martin Tabor’s gross pay for the year is \$28,500. The state income tax rate is 3.5 percent. If Tabor takes a single exemption for himself, how much is withheld from his yearly earnings for state income tax? **Use the Personal Exemptions table on page 175.**

- | | |
|---|-----------------------------------|
| 1. Find his taxable wages. | 2. Find the tax withheld. |
| Annual Gross Pay – Personal Exemptions | Taxable Wages × Tax Rate |
| \$28,500 – \$2,000 = \$26,500 | \$27,000 × .035 = \$927.50 |

Practice

Find the annual state income tax withheld.

- | | |
|--|---|
| 1. Gross pay: \$38,550; married, 2 dependents; state income tax rate: 3 percent. | 3. Gross pay: \$24,872; single, zero dependents; state income tax rate: 3.75 percent. |
| 2. Gross pay: \$47,425; married, zero dependents; state income tax rate: 4.25 percent. | 4. Gross pay: \$29,149; single, one dependent; state income tax rate: 2.95 percent. |

Use the Personal Exemptions table on page 175 to answer the following questions:

- Clayton McGrath earns \$23,000 per year. He is married with 2 dependents, and his state income tax rate is 2.75 percent. What are his personal exemptions? How much is withheld per year for state income tax?
- Maggie Cook earns \$26,500 annually. She is single with 3 dependents, and her state tax rate is 3.5 percent. What are her personal exemptions? How much is withheld per year for state income tax?
- Standardized Test Practice** Lawanda Shelbold is a registered nurse with an annual salary of \$32,000. She is married, has 1 child, and claims 3 withholding allowances. If the state tax rate is 3.5 percent, how much is withheld annually from her gross pay for federal and state income tax?
A. \$980 B. \$2,834 C. \$2,366 D. \$1,456

2-3

Computing Graduated State Income Tax

Rather than a flat percentage rate, some states have what is known as a **graduated income tax**. This means that your state income tax is computed at a varying rate each time you reach a new income level. The higher your income, the greater your tax.

Example

Find the amount of state income tax deducted from each paycheck.

Carla Erpelding’s annual salary is \$28,500. She is paid biweekly. Her personal exemptions total \$1,500. The state income tax is calculated on the following graduated basis: 2.5 percent of the first \$25,000 and 3.5 percent over \$25,000.

1. Find the taxable wages.
 $(\$28,500 - \$1,500) = \$27,000$
2. Find the annual tax withheld.
 First \$25,000 = $(\$25,000 \times .025) = \625
 Over \$25,000 = $(\$27,000 - \$25,000) \times .035 = \$2,000 \times .035 = \70
 Annual Tax = $\$625 + \$70 = \$695$

3. Find the tax per period.
Annual Tax ÷ Number of Pay Periods per Year = Tax Withheld per Pay Period
 $\$695.00 \div 26 = \26.73 tax per pay period

Practice

Using the following graduated income tax rates, find the tax withheld per pay period.

State Tax Rate	Annual Income Earned
2.75%	First \$10,000
3.25%	Next \$15,000
5.00%	Over \$25,000

1. Annual salary: \$38,550; personal exemptions: \$4,400; paid biweekly.
2. Annual salary: \$47,425; personal exemptions: \$3,000; paid weekly.
3. Annual salary: \$29,149; personal exemptions: \$2,200; paid monthly.
4. Annual salary: \$24,872; personal exemptions: \$1,500; paid semimonthly.
5. **Standardized Test Practice** Mitchell Gomez is an auto mechanic. His annual gross salary is \$35,500. He is married with 1 dependent, allowing him \$3,700 in yearly personal exemptions. If his state income tax is based on the following graduated rate, how much is withheld from his semimonthly paycheck?

State Tax Rate	Annual Income Earned
3.25%	First \$15,000
3.60%	Next \$15,000
4.90%	Over \$30,000

- A. \$46.49 B. \$54.04 C. \$92.98 D. \$1,115.70

2-4

Computing Social Security and Medicare Taxes

The Federal Insurance Contributions Act (FICA) requires that your employer deduct a total of 7.65 percent from your paycheck for **Social Security** and **Medicare** tax purposes. A Social Security rate of 6.2 percent is deducted on the first \$90,000 you earn. A Medicare rate of 1.45 percent is deducted from all your earnings. In addition, your employer is required to pay an amount equal to your contribution.

Tax Withheld = Gross Pay \times Tax Rate

Example

Find the amount deducted for Social Security and Medicare taxes.

Adrian Dunbar's weekly pay is \$1,750. What amount is deducted from his pay this week for Social Security taxes? For Medicare taxes?

- Find the amount deducted for Social Security.
 $\$1,750 \times 6.2\% = \mathbf{\$108.50 \text{ deducted for Social Security}}$
- Find the amount deducted for Medicare.
 $\$1,750 \times 1.45\% = \mathbf{\$25.38 \text{ deducted for Medicare}}$

Practice

For problems 1–3, find the *combined* Social Security and Medicare taxes withheld for the pay period.

- Weekly salary: \$650; earnings to date: \$30,000.
- Biweekly salary: 1,850; earnings to date: \$37,000.
- Monthly salary: \$8,500; earnings to date: \$86,500.
- A nurse's aide has earned \$21,670. She earned \$1,970 this month. How much is deducted this month for Social Security? For Medicare?
- A real estate agent has earned \$92,000. He earned \$2,500 this month. How much is deducted this month for Social Security? For Medicare?
- A teacher has earned \$20,385. She earned \$1,020 this biweekly pay period. How much is deducted this pay period for Social Security? For Medicare?
- A beautician has earned \$26,549. She is married and claims 1 federal allowance. How much is deducted from her weekly \$549 paycheck for federal income tax, for Social Security, and for Medicare?
- Standardized Test Practice** Michaela Jordan is a tax lawyer who earns \$132,000 per year and is paid at the end of every month. What is the *combined* amount withheld from her September paycheck for Social Security and Medicare?
A. \$765.00 B. \$283.50 C. \$620.00 D. \$145.00

2-6

Computing Your Net Pay

Taxes and insurance aren't the only things deducted from your gross pay. Union dues, state tax, and local tax might also be deducted. An earnings statement lists your gross pay, all your deductions, and your **net pay** for each pay period. (**Note: Use the Social Security tax rate of 6.2 percent on the first \$84,900 earned, the Medicare tax rate of 1.45 percent on all earnings, and the tax tables on pages 170–173 for federal income tax.**)

Net Pay = Gross Pay – Total Deductions

Example

Find the net pay.

Isaac Reiser's gross weekly salary is \$515. He is single and claims one allowance. The state tax is 2.8 percent of gross pay with no personal exemption allowances. Reiser also participates in his employer's medical insurance plan, which costs him \$16.83 per week. What is his net pay for the weekly pay period?

- Find his total deductions.
- Find his net pay.

a. Federal income tax: \$55.00

b. Social Security: $\$515 \times 0.062 = \31.93

c. Medicare: $\$515 \times 0.0145 = \7.47

d. State tax: $\$515 \times 0.028 = \14.42

e. Medical insurance: \$16.83

Total Deductions = $\$55.00 + \$31.93 + \$7.47 + \$14.42 + \$16.83 = \125.65

Gross Pay – Total Deductions

$\$515.00 - \$125.65 = \mathbf{\$389.35 \text{ net pay}}$

Practice

Find the net pay.

- Serena Masters is single and claims 1 allowance. Her gross weekly pay is \$440.00. Each week she pays federal, Social Security, and Medicare taxes, \$14.40 for medical insurance, and \$10.00 for union dues.
- Dustin Ambrose is married and claims 3 allowances. His gross weekly pay is \$628.00. Each week he pays federal, Social Security, and Medicare taxes, \$52.00 for medical insurance, and \$23.50 toward his retirement fund.
- Andre Quinn earns \$600 per week. He is married and claims 2 allowances. Weekly deductions include federal, Social Security, and Medicare taxes, a state tax of 2.5 percent on gross earnings, a local tax of 1 percent on gross earnings, and medical insurance. The company pays 65 percent of the \$3,975 annual medical cost.
- Standardized Test Practice** Barbara Brach earns \$492.00 per week. She is single and claims 1 allowance. Her state tax rate is 2.8 percent and her local tax rate is 1.25 percent, both on gross earnings. Her medical insurance plan costs \$2,550.00 per year, of which the company pays 70 percent. Medicare and Social Security are also deducted from her paycheck. What is her net pay?
A. \$331.10 B. \$368.74 C. \$388.36 D. \$367.73

3-1

Computing Your Average Monthly Expenditures

Recordkeeping is an essential task if you want to manage your money properly. By keeping track of your monthly **expenditures** (items you spend money on), you can determine whether the amount of money you are earning is enough to live on. You should enter your expenses on a **budget sheet**. This will help you keep track of your expenditures so you can total them up at the end of the month.

$$\text{Average Monthly Expenditure} = \frac{\text{Sum of Monthly Expenditures}}{\text{Number of Months}}$$

Example

Find the average monthly expenditure.

Jim Miller had the following monthly expenses:

September: \$1,540 October: \$1,899 November: \$1,756 December: \$2,244

What is his average monthly expenditure for the 4-month period?

1. Sum of Monthly Expenditures = \$1,540 + \$1,899 + \$1,756 + \$2,244 = \$7,439
2. $\$7,439 \div 4 = \mathbf{\$1,859.75}$ average monthly expenditure

Practice

Find the average monthly expenditure.

1. January: \$898; February: \$972; March: \$1,049.
2. April: \$2,165; May: \$2,531; June: \$1,896; July: \$2,354.
3. August: \$1,742.88; September: \$1,596.77; October: \$1,694.63; November: \$1,963.04; December: \$2,317.48.

Jennifer Donaldson has the following monthly expenditures:

Expense	Monthly Expenditure	Expense	Monthly Expenditure
Rent Apartment	\$625	Groceries	\$265
Utilities	318	Entertainment	150
Transportation	455	Misc. Expenses	177

4. What is her total monthly expenditure?
5. What *annual* salary does she need to earn to meet her living expenses?
6. **Standardized Test Practice** Last quarter, Jamal Williams had the following monthly expenditures: January: \$1,875; February: \$1,643; March: \$2,173. His expenses for April were 1.5 times his expenses for February. His expenses for May equal his average monthly expenditures for January through March. What is Williams' average monthly expenditure for April through May?
 A. \$1,897.00 B. \$2,464.50 C. \$2,180.75 D. \$2,010.50

3-2

Preparing a Budget Sheet

If you've been keeping careful track of your expenditures, you should be able to prepare a budget sheet. Your budget sheet should include: your **living expenses**, which vary from month to month (such as food and utilities); your **fixed expenses**, which remain the same every month (such as rent and car payments); and your **annual expenses**, which you only pay once a year (such as insurance premiums and property taxes).

$$\begin{array}{rcccl} \text{Total} & & \text{Monthly} & & \text{Monthly} & & \text{Monthly Share} \\ \text{Monthly} & = & \text{Living} & + & \text{Fixed} & + & \text{of Annual} \\ \text{Expenses} & & \text{Expenses} & & \text{Expenses} & & \text{Expenses} \end{array}$$

Example

Find the total monthly expenses.

The O'Neils' budget sheet shows the following expenditures:

Expense	Monthly Expenditure	Expense	Monthly Expenditure
Groceries	\$290	Car Payment	\$ 550
Entertainment	85	Insurance (per year)	387
Utilities	215	Property Tax (per year)	3,000
Rent	900		

What is the total of their monthly expenses?

1. Monthly Living Expenses = $\$290 + \$85 + \$215 = \590
2. Monthly Fixed Expenses = $\$900 + \$550 = \$1,450$
3. Monthly Share of Annual Expenses = $(\$387 + \$3,000) \div 12 = \$3,387.00 \div 12 = \282.25
4. Total Monthly Expenses = $\$590.00 + \$1,450.00 + \$282.25 = \mathbf{\$2,322.25}$

Practice

Find the total monthly expenses.

1. Living: \$675; fixed: \$940; share of annual: \$335.
2. Living: \$795.64; fixed: \$1,240.00; share of annual: \$327.85
3. Monthly living: \$820; fixed: \$975; total annual: \$3,000
4. Monthly living: \$946.55; fixed: \$789.25; total annual: \$3,267.00
5. **Standardized Test Practice** Lucille Richards earns \$1,250.00 semimonthly and has the following expenses—monthly living expenses: \$837.50; fixed monthly expenses: \$925.00; annual expenses: \$4,200.00. How much can she afford to spend each month on entertainment?
 A. \$0.00 B. \$387.50 C. \$595.83 D. \$1,187.50

3-3

Using a Budget

Now that you know how to prepare a budget sheet, you can use it to plan your future spending. First, prepare an **expense summary** comparing the amount you actually spend to the amount you have in your budget. Next, factor in money for an **emergency fund** to allow for any unpredictable expenses that might arise.

Example

Compare amount budgeted to actual expenditures.

Gigi Mariano prepared a budget, allowing herself \$240.00 for groceries. Last month she actually spent \$251.89. How much more or less did she spend on groceries than she budgeted?

1. Is the amount she spent more or less than the amount she budgeted?
 $\$251.89 > \240.00 so she spent *more* than she budgeted.
2. How much more did she spend?
 $\$251.89 - \$240.00 = \mathbf{\$11.89 \text{ more}}$

Practice

Find how much more or less is spent than the budgeted amount.

1. Budgeted: \$596; spent: \$542.
2. Budgeted: \$645; spent: \$667.
3. Budgeted: \$1,250.75; spent: \$1,272.98
4. Budgeted: \$972.50; spent: \$970.85.

The Donaldsons prepared the following expense summary for the month of August:

Expense	Monthly Expenditure	Amount Spent
Utilities	\$185.00	\$177.50
Transportation	300.00	312.00
Groceries	350.00	352.99
Entertainment	100.00	95.50
Misc. Expenses	75.00	67.95

5. Which expenses were more than the Donaldsons budgeted for?
6. Which expenses were less than they budgeted for?
7. Were their total monthly expenses more or less than they budgeted for and by how much?
8. **Standardized Test Practice** Kelly Krantz saved \$250.00 to buy clothes and supplies for the new school year. She went to the mall and bought the following items: 3 pair of jeans that cost \$35.00 each; 5 shirts that cost \$15.50 each; new shoes for \$48.00; 6 notebooks at a cost of \$1.50 each; and a pack of pens for \$2.75. How much more or less than she budgeted did she actually spend?
A. \$7.75 less **B.** \$7.75 more **C.** \$147.25 more **D.** \$147.25 less