

3 Federal and State Income Tax Withholding



LEARNING OBJECTIVES

- Identify and distinguish between mandatory and voluntary deductions
- Determine taxable earnings
- Calculate federal income tax withholding using the wage-bracket method
- Calculate federal income tax withholding using the percentage method
- Discuss state and local income tax withholding

Once an employee's earnings are determined, the next step is to calculate the amounts withheld from the earnings. While some of these deductions are mandatory (such as Medicare tax), others are voluntary and may be elected by the employee. In this chapter, you will identify a wide range of both mandatory and voluntary deductions. Next, you will examine federal income tax withholding more closely and learn two methods for calculating the tax. You will then review state and local income tax withholding, and will conclude by entering both federal and state income tax withholding figures in the payroll register.



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Deductions from Employee Earnings

Once an employee's gross pay is calculated, certain amounts are withheld by the employer and are not included in the employee's paycheck. These amounts are referred to as **deductions**. Some of these amounts must be withheld, and these are called **mandatory deductions**. Others may be requested by the employee, and these are referred to as **voluntary deductions**.

Mandatory Deductions

Employees are subject to a number of mandatory deductions that their employers are required to withhold from each paycheck. Among these deductions are the following:

- **Federal income tax withholding**—This tax (also called *federal income tax*) is collected by the federal government to fund a wide range of government agencies. A small percentage of employees are exempt from this tax, as you will see later in this chapter.
- **State income tax withholding**—The majority of states collect this tax (also called *state income tax*) to fund state operations. As of 2019, nine states (Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming) did not collect state taxes on individual incomes.

NOTE! In 2019 New Hampshire and Tennessee did collect taxes on dividend and interest income.

- **Local income tax withholding**—Some municipalities, such as Manhattan in New York State, require that local income tax withholding (also called *local income tax*) be deducted from employee earnings to fund government operations in their respective municipalities.
- **Social Security tax (OASDI)**—This tax is withheld from employee earnings to fund the Social Security system, which pays benefits to retired or disabled workers, as well as their dependents and survivors. This tax is subject to an income threshold, and therefore (in 2019) was only calculated as 6.2% of the first \$132,900 earned during the year. This will be discussed in detail in Chapter 4.
- **Medicare tax (HI)**—This tax (in 2019) was calculated as 1.45% of all employee earnings. These funds operate the Medicare federal health insurance program that covers individuals 65 years of age or older and certain disabled individuals. This will be discussed in detail in Chapter 4.

TIP! Social Security tax and Medicare tax, in conjunction, are referred to as FICA (Federal Insurance Contributions Act) taxes.

- **State disability insurance tax**—Five states (California, Hawaii, New Jersey, New York, and Rhode Island) and the territory of Puerto Rico require that disability insurance be withheld from employee pay. With these funds, the states provide benefits to temporarily disabled employees who are unable to work as a result of a non-work-related circumstance. This will be discussed in detail in Chapter 4.

Voluntary Deductions

In addition to the items that must be withheld from an employee's pay, there are a number of amounts that an employee may elect to have withheld. Common examples of these voluntary deductions, which will be examined further in Chapter 4, are as follows:

- **Union dues**—For those employees who are unionized, the associated dues may be withheld from their earnings and remitted directly to the union.
- **Retirement plans**—Employees may elect to have monies withheld for retirement plans, some of which can be tax-deferred (no federal income tax is paid on these funds when they are withheld). These are called *defined contribution plans*, as the employee's contribution percentage (portion of gross pay deducted) is fixed.
- **Medical plans**—Depending on various criteria, employees may realize a tax benefit from having funds withheld and directed to a medical savings plan. These plans differ from flexible spending accounts (discussed next) in that the funds roll over and can be used in subsequent years.

NOTE! Medical plans differ from health insurance premiums, which employees can elect to have withheld from gross earnings and which pay for (either in part or entirely) the employee's health insurance coverage.

- **Cafeteria plans**—Offered by some employers, these plans can provide a variety of benefits, and designated funds are not subject to federal income tax withholding. One common type of cafeteria plan is a **flexible spending account**, through which employees may be reimbursed for qualified benefits such as dependent care and medical expenses.

Not technically a voluntary deduction for the employee to whom it is applied, a *wage garnishment* represents monies withheld from pay as a result of a court order. These amounts may fund a wide range of monetary obligations, including child support. Individual states have varying requirements regarding the reporting of newly hired employees, in large part to identify those employees for whom garnishments should be made.

Distinguishing Between Gross Pay and Taxable Pay

As you saw in the previous chapter, gross pay encompasses all earnings of an employee for a given period. However, each of the above-listed taxes is not necessarily calculated based on this gross pay. For example, since dependent care expenses and cafeteria plans are tax-deferred, the amount contributed to these must be subtracted from gross pay before determining federal income tax withholding. Additionally, 401(k) and 403(b) plans are both tax-deferred retirement plans that are exempt from federal income tax. Taxable pay (also called taxable income) represents the portion of gross pay used to calculate each of the mandatory deductions.

Note that taxable pay used to calculate federal income tax withholding can be different from taxable pay used to calculate Social Security or Medicare tax. For

example, deductions for a 401(k) or 403(b) retirement plan are not taxable for federal income tax withholding but are taxable for Social Security and Medicare taxes. The following chart summarizes the taxes for which different employee payments are either taxable (T) or nontaxable (N). Contrary to the information displayed below, when offered as part of a cafeteria plan, group-term life insurance benefits exceeding \$50,000 are subject to FICA taxes, and adoption assistance benefits are subject to both FICA and FUTA taxes.

| | Federal Withholding Tax | FICA Taxes | FUTA Taxes |
|----------------------------|-------------------------|------------|------------|
| 401(k) retirement plan | N | T | T |
| 403(b) retirement plan | N | T | T |
| Cafeteria plan | N | N | N |
| Charitable contribution | T | T | T |
| Dependent care benefit | N | N | N |
| Flexible spending account | N | N | N |
| Medical savings plan | N | N | N |
| SIMPLE IRA retirement plan | N | T | T |
| Union dues | T | T | T |
| Wage garnishment | T | T | T |

Depending on the regulations in place, taxable income for both state and local income tax withholdings can also differ from that for federal income tax withholding. For simplicity, we will assume throughout the text that, for every employee, taxable income is the same for federal, state, and local income tax withholding.

Case in Point 3-1

Determine Gross and Taxable Pay

Based on the information provided below, determine the gross pay for each employee. Then calculate taxable pay for federal income tax withholding, Social Security tax, and Medicare tax.

1. An employee works 37 regular hours during the first workweek of 2019 and earns \$8.25/hour. He has requested that his employer withhold 8% of gross pay, which is to be contributed to a 401(k) plan.

Gross pay for this employee, who did not work any overtime hours, was \$305.25 (37 hours × \$8.25).

As 401(k) contributions are tax-deferred for the purposes of federal income tax withholding, this employee's contribution must be subtracted from gross pay in order to determine taxable pay for federal income tax withholding. The 401(k) contribution is \$24.42 ($\$305.25 \times 8\%$); therefore, taxable pay for federal income tax withholding is \$280.83 ($\$305.25 - \24.42).

For this employee, there are no amounts that must be subtracted from gross pay in order to arrive at taxable pay for Social Security tax or Medicare tax (401(k) contributions are taxable for these two taxes). Therefore, taxable pay for both Social Security tax and Medicare tax is \$305.25.

2. An employee works 43 hours (3 of which were overtime hours) during a workweek in November of 2019. The employee earns \$37.50/hour, with his employer paying 1.5 times the regular rate of pay for overtime hours. To date, he has earned \$132,100 during the year (these earnings include hourly wages, as well as bonus payments, which are also subject to FICA tax). He has requested that his employer withhold 10% of gross pay, which is to be contributed to a 403(b) plan.

Regular earnings for this employee were \$1,500 (40 hours \times \$37.50/hour). The overtime rate of pay is \$56.25/hour ($\$37.50/\text{hour} \times 1.5$), and the overtime earnings were \$168.75 (3 hours \times \$56.25/hour). Therefore, gross pay for the week was \$1,668.75 (\$1,500 regular earnings + \$168.75 overtime earnings).

Taxable earnings for federal income tax withholding must exclude the 403(b) contribution. This contribution was \$166.88 ($\$1,668.75$ gross pay \times 10%); therefore, the taxable earnings for federal income tax withholding were \$1,501.87 ($\$1,668.75$ gross pay $-$ \$166.88 403(b) contribution).

The previous annual earnings of \$132,100, when added to the gross pay of \$1,668.75, total \$133,768.75. As this exceeds the 2019 Social Security tax threshold of \$132,900, only a portion of the gross pay is taxable for Social Security tax. The portion of gross pay that falls below the threshold totals \$800 ($\$132,900$ threshold $-$ \$132,100 previous annual earnings), and therefore this \$800 represents the taxable pay for Social Security tax.

Medicare tax is not subject to an earnings threshold. In addition, 403(b) contributions are not exempt from Medicare tax. Therefore, taxable pay for Medicare tax is the same as the gross pay of \$1,668.75.

Federal Income Tax Withholding

The manner in which federal income tax withholding is remitted to the United States government is referred to as a **pay-as-you-go** system. Under this system, income tax must be paid as the income is earned.

The pay-as-you-go system was established as a result of the **Current Tax Payment Act of 1943**. This act modified the federal income tax system such that payments could no longer be made in the subsequent year, but instead must be paid in the year that the income is earned. To facilitate the collection of these taxes, the act stipulated that employers must withhold these taxes from employee pay and remit the withholdings to the federal government. Over the next few pages we will review two methods by which these taxes may be calculated. In Chapter 6 we will then examine how these taxes are reported on a quarterly basis within Form 941 and on an annual basis within Forms W-2 and W-3.

Under limited circumstances, employees may be exempted from paying federal income tax withholding. Typically, an employee who qualifies for exemption did not owe federal income tax during the prior year and does not expect to owe it in the current year. In this instance, the employee must file a W-4 Form with the employer indicating the exempt status. These qualifying employees are often low-income earners who, in many instances, qualify for the Earned Income Credit, which reduces the tax burden on their year-end personal tax returns.

For the employer to withhold the correct amount of federal income tax for each non-exempt employee, a number of calculation methods may be utilized. The two primary methods are the wage-bracket method and the percentage method.

The Wage-Bracket Method

Under the **wage-bracket method**, an employee's marital status, withholding allowances, and taxable pay are used to locate the correct amount of withholding on a federal income tax withholding table. This is one of the primary instances in which key information from the employee's W-4 Form (marital status and federal withholding allowances) is utilized to determine applicable taxes.

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Updated Federal Income Tax Withholding Tables are published each year in Circular E.

| SINGLE Persons—WEEKLY Payroll Period | | | | | | | | | | | | |
|---|---------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| (For Wages Paid through December 2019) | | | | | | | | | | | | |
| And 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 | \$73 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 73 | 84 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 84 | 95 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | 106 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 106 | 117 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 117 | 128 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 128 | 139 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 139 | 150 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 150 | 161 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 161 | 172 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 172 | 183 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 183 | 194 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 194 | 205 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 205 | 216 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 216 | 227 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 227 | 238 | 16 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 238 | 249 | 17 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 249 | 260 | 18 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 260 | 271 | 19 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 271 | 282 | 21 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 282 | 293 | 22 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 293 | 304 | 23 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304 | 315 | 25 | 16 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 315 | 326 | 26 | 17 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 326 | 337 | 27 | 18 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 337 | 348 | 29 | 19 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 348 | 359 | 30 | 20 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | 370 | 31 | 22 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | 381 | 33 | 23 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 381 | 392 | 34 | 24 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 392 | 403 | 35 | 26 | 16 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 403 | 414 | 37 | 27 | 17 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 414 | 425 | 38 | 28 | 18 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 425 | 436 | 39 | 29 | 20 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 436 | 447 | 40 | 31 | 21 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 447 | 458 | 42 | 32 | 22 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 458 | 469 | 43 | 33 | 24 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| 469 | 480 | 44 | 35 | 25 | 16 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 480 | 491 | 46 | 36 | 26 | 17 | 9 | 1 | 0 | 0 | 0 | 0 | 0 |
| 491 | 502 | 47 | 37 | 28 | 18 | 10 | 2 | 0 | 0 | 0 | 0 | 0 |
| 502 | 513 | 48 | 39 | 29 | 19 | 11 | 3 | 0 | 0 | 0 | 0 | 0 |
| 513 | 524 | 50 | 40 | 30 | 21 | 12 | 4 | 0 | 0 | 0 | 0 | 0 |
| 524 | 535 | 51 | 41 | 32 | 22 | 13 | 5 | 0 | 0 | 0 | 0 | 0 |
| 535 | 546 | 52 | 43 | 33 | 23 | 14 | 6 | 0 | 0 | 0 | 0 | 0 |
| 546 | 557 | 54 | 44 | 34 | 25 | 16 | 7 | 0 | 0 | 0 | 0 | 0 |
| 557 | 568 | 55 | 45 | 36 | 26 | 17 | 9 | 0 | 0 | 0 | 0 | 0 |
| 568 | 579 | 56 | 47 | 37 | 27 | 18 | 10 | 2 | 0 | 0 | 0 | 0 |
| 579 | 590 | 58 | 48 | 38 | 29 | 19 | 11 | 3 | 0 | 0 | 0 | 0 |
| 590 | 601 | 59 | 49 | 40 | 30 | 20 | 12 | 4 | 0 | 0 | 0 | 0 |
| 601 | 612 | 60 | 51 | 41 | 31 | 22 | 13 | 5 | 0 | 0 | 0 | 0 |
| 612 | 623 | 62 | 52 | 42 | 33 | 23 | 14 | 6 | 0 | 0 | 0 | 0 |
| 623 | 634 | 63 | 53 | 44 | 34 | 24 | 15 | 7 | 0 | 0 | 0 | 0 |
| 634 | 645 | 64 | 55 | 45 | 35 | 25 | 16 | 8 | 0 | 0 | 0 | 0 |
| 645 | 656 | 66 | 56 | 46 | 36 | 27 | 17 | 9 | 1 | 0 | 0 | 0 |
| 656 | 667 | 67 | 57 | 47 | 38 | 28 | 18 | 10 | 2 | 0 | 0 | 0 |
| 667 | 678 | 68 | 59 | 49 | 39 | 29 | 20 | 11 | 3 | 0 | 0 | 0 |
| 678 | 689 | 70 | 60 | 50 | 40 | 31 | 21 | 13 | 5 | 0 | 0 | 0 |
| 689 | 700 | 71 | 61 | 51 | 42 | 32 | 22 | 14 | 6 | 0 | 0 | 0 |
| 700 | 711 | 72 | 62 | 53 | 43 | 33 | 24 | 15 | 7 | 0 | 0 | 0 |
| 711 | 722 | 73 | 64 | 54 | 44 | 35 | 25 | 16 | 8 | 0 | 0 | 0 |
| 722 | 733 | 75 | 65 | 55 | 46 | 36 | 26 | 17 | 9 | 1 | 0 | 0 |
| 733 | 744 | 76 | 66 | 57 | 47 | 37 | 28 | 18 | 10 | 2 | 0 | 0 |
| 744 | 755 | 77 | 68 | 58 | 48 | 39 | 29 | 19 | 11 | 3 | 0 | 0 |
| 755 | 766 | 79 | 69 | 59 | 50 | 40 | 30 | 21 | 12 | 4 | 0 | 0 |
| 766 | 777 | 80 | 70 | 61 | 51 | 41 | 32 | 22 | 13 | 5 | 0 | 0 |
| 777 | 788 | 81 | 72 | 62 | 52 | 43 | 33 | 23 | 14 | 6 | 0 | 0 |

The withholding table shown above is for an employee whose marital status is single and who is paid on a weekly basis. Weekly wage ranges are provided on the left of the table, and federal withholding allowances are at the top. To determine an employee's federal income tax withholding, an employer locates the intersection of the applicable wage range of the employee's taxable pay and the number of withholding allowances (found on the employee's W-4 Form).

For example, if a single employee is paid on a weekly basis and claims one federal withholding allowance and earns wages of \$312, that employee is subject to \$16 of federal income tax withholding. This employee would look at the intersection of the \$304 to \$315 wages row and the 1 withholding allowance column to determine this tax amount.

If this same employee earned wages of \$330, the \$326 to \$337 row is applicable, resulting in federal income tax withholding of \$18. The wage increments represent *at least... but less than*; therefore, wages of \$326 correspond with the \$326 to \$337 row. Using the \$315 to \$326 row, in this instance, would be incorrect.

TIP! Notice that, as the number of withholding allowances increases, the federal income tax withholding decreases. To ensure that sufficient tax is withheld during the year, employees may elect to claim fewer withholding allowances than they are permitted, thus increasing total withholding.

On the Web

irs.gov/pub/irs-pdf/p15.pdf



Many different withholding tables are published by the Internal Revenue Service (IRS) in Circular E. Aside from the *Single: Weekly* table, a portion of which is shown above, the following tables are also available:

- Married: Weekly
- Single: Biweekly
- Married: Biweekly
- Single: Semimonthly
- Married: Semimonthly
- Single: Monthly
- Married: Monthly
- Single: Daily
- Married: Daily

These tables can all be viewed in Appendix A. Each table is two pages long and displays the appropriate federal income tax withholding for an employee with up to 10 withholding allowances. Circular E provides instruction regarding the federal income tax withholding calculation (under the wage-bracket method) for employees claiming more than 10 withholding allowances. However, in the event that an employee earns more than the largest wage range on the appropriate table, the percentage method must be used instead of the wage-bracket method.

The Percentage Method

An alternative method for determining federal income tax withholding is the **percentage method**. To use this method, the employer completes a three-step process:

Step 1: Multiply the employee’s number of federal withholding allowances by the applicable figure shown in the table below.

This *One Withholding Allowance* table is published each year in Circular E.

| Payroll Period | One Withholding Allowance |
|---|---------------------------|
| Weekly | \$ 80.80 |
| Biweekly | 161.50 |
| Semimonthly | 175.00 |
| Monthly | 350.00 |
| Quarterly | 1,050.00 |
| Semiannually | 2,100.00 |
| Annually | 4,200.00 |
| Daily or miscellaneous (each day of the payroll period) | 16.20 |

Step 2: Subtract the Step 1 result from the employee’s taxable pay.

Step 3: Use the percentage method tables (provided annually in Circular E) to calculate the federal income tax withholding, based on the result from Step 2.

This percentage method table provides calculation instruction for both single and married employees earning weekly pay.

| (For Wages Paid in 2019) | | | | | | | |
|---|----------------|--|---------------------|---|-----------------|--|---------------------|
| TABLE 1—WEEKLY Payroll Period | | | | | | | |
| (a) SINGLE person (including head of household)— | | | | (b) MARRIED person— | | | |
| If the amount of wages (after subtracting withholding allowances) is: | | The amount of income tax to withhold is: | | If the amount of wages (after subtracting withholding allowances) is: | | The amount of income tax to withhold is: | |
| Not over \$73 | | \$0 | | Not over \$227 | | \$0 | |
| Over— | But not over— | of excess over— | | Over— | But not over— | of excess over— | |
| \$73 | —\$260 . . . | —\$73 | \$0.00 plus 10% | \$227 | —\$600 . . . | —\$227 | \$0.00 plus 10% |
| \$260 | —\$832 . . . | —\$260 | \$18.70 plus 12% | \$600 | —\$1,745 . . . | —\$600 | \$37.30 plus 12% |
| \$832 | —\$1,692 . . . | —\$832 | \$87.34 plus 22% | \$1,745 | —\$3,465 . . . | —\$1,745 | \$174.70 plus 22% |
| \$1,692 | —\$3,164 . . . | —\$1,692 | \$276.54 plus 24% | \$3,465 | —\$6,409 . . . | —\$3,465 | \$553.10 plus 24% |
| \$3,164 | —\$3,998 . . . | —\$3,164 | \$629.82 plus 32% | \$6,409 | —\$8,077 . . . | —\$6,409 | \$1,259.66 plus 32% |
| \$3,998 | —\$9,887 . . . | —\$3,998 | \$896.70 plus 35% | \$8,077 | —\$12,003 . . . | —\$8,077 | \$1,793.42 plus 35% |
| \$9,887 | | —\$9,887 | \$2,957.85 plus 37% | \$12,003 | | —\$12,003 | \$3,167.52 plus 37% |

For example, if a single employee has \$1,080.80 of taxable pay, is paid weekly, and claims one federal withholding allowance, Step 1 results in \$80.80 (1 allowance × \$80.80 weekly figure in table). Step 2 results in \$1,000 (\$1,080.80 taxable pay minus the \$80.80 Step 1 result). Step 3 results in the employee having federal income tax withholding of \$87.34 + (22% × [\$1,000 - \$832]) = \$124.30. Based on the third row of the *single* portion of the table, the excess of the \$1,000 wages over \$832 must be multiplied by 22%. This is how we determine the amount that is added to the \$87.34 starting point to arrive at federal income tax withholding.

NOTE! The percentage method often yields a different withholding amount than the wage-bracket method for the same circumstance. In spite of this difference, both methods are acceptable.

Seven other versions of the percentage method table are also provided in Circular E. These allow for the calculation of federal income tax withholding for employees paid on the following bases: biweekly, semimonthly, monthly, quarterly, semiannually, annually, and daily.

TIP! More types of tables are provided under the percentage method than the wage-bracket method. For this reason, the wage-bracket method cannot be used for employees with quarterly, semiannual, or annual pay periods.

Case in Point 3-2

Calculate Federal Income Tax Withholding

For each of the following employees of Lucky Ties Apparel, let's calculate the federal income tax withholding for the current weekly pay period. We'll use the wage-bracket method for the first three employees and the percentage method for the final two employees.

Before You Begin: Federal withholding tax tables for both the wage-bracket method and the percentage method can be found in Appendix A.

1. Paul Rogers (single; one federal withholding allowance) earned gross pay of \$402.50. For each period, he makes a 401(k) contribution of 8% of gross pay.

Wage-Bracket Method:

Taxable pay for federal income tax withholding excludes the 401(k) contribution. This retirement plan contribution totals \$32.20 ($\$402.50 \times 8\%$), and therefore taxable pay is \$370.30 ($\$402.50 - \32.20).

Using the Single: Weekly withholding table, this taxable pay falls in the \$370 to \$381 range. The intersection of this row and the one withholding allowance column yields federal income tax withholding of \$23.

2. Maryanne Sherman (single; two federal withholding allowances) earned gross pay of \$769.23. She does not make any retirement plan contributions.

Wage-Bracket Method:

All of the gross pay is taxable for federal income tax withholding purposes; therefore, taxable pay is \$769.23.

Using the Single: Weekly withholding table, this taxable pay falls in the \$766 to \$777 range. The intersection of this row and the two withholding allowances column yields federal income tax withholding of \$61.

3. Bill Novak (married; four federal withholding allowances) earned gross pay of \$725. For each period, he makes a flexible spending account contribution of 6% of gross pay.

Wage-Bracket Method:

Taxable pay for federal income tax withholding excludes the flexible spending account contribution. This contribution totals \$43.50 ($\$725 \times 6\%$), and therefore taxable pay is \$681.50 ($\$725 - \43.50).

Using the Married: Weekly withholding table, this taxable pay falls in the \$678 to \$689 range. The intersection of this row and the four withholding allowances column yields federal income tax withholding of \$13.

4. Angelo Dorsett (single; two federal withholding allowances) earned gross pay of \$883.75. For each period, he makes a dependent care flexible spending account contribution of 10% of gross pay.

Percentage Method:

Before undertaking the three-step process for the percentage method, taxable pay must first be determined. Taxable pay for federal income tax withholding excludes the dependent care flexible spending account contribution. This dependent care flexible spending account contribution totals \$88.38 ($\$883.75 \times 10\%$), and therefore taxable pay is \$795.37 ($\$883.75 - \88.38).

Step 1: Two withholding allowances \times \$80.80 (weekly one withholding allowance amount) = \$161.60.

Step 2: \$795.37 (taxable pay) – \$161.60 = \$633.77.

Step 3: Using the *single* side of the *weekly* table, the step 2 result falls in the \$260 to \$832 range. Therefore, federal income tax withholding is calculated as $\$18.70 + (12\% \times [\$633.77 - \$260])$, which equals \$63.55.

5. Melissa Kubiak (married; four federal withholding allowances) earned gross pay of \$622.50. She does not make any retirement plan contributions.

Percentage Method:

Before undertaking the three-step process for the percentage method, taxable pay must first be determined. All of the gross pay is taxable for federal income tax withholding purposes; therefore, taxable pay is \$622.50.

Step 1: Four withholding allowances \times \$80.80 (weekly one withholding allowance amount) = \$323.20.

Step 2: \$622.50 (taxable pay) – \$323.20 = \$299.30.

Step 3: Using the *married* side of the *weekly* table, the step 2 result falls in the \$227 to \$600 range. Therefore, federal income tax withholding is calculated as $\$0 + (10\% \times [\$299.30 - \$227])$, which equals \$7.23.

Other Federal Income Tax Withholding Considerations

An employee's federal income tax withholding can be impacted by a number of other circumstances. Among the most common are the passing away or termination of an employee, and changes in the number of dependents (or other similar changes) that require the submission of an updated W-4 Form.

Deceased and Terminated Employees

In the event that an employee dies, it is likely that a portion of the employee's earnings will be paid by the employer after death. Any such payments are not subject to federal income tax withholding and should be excluded from the calculation of taxable pay.

When an individual's employment ends, either voluntarily or involuntarily, that person is entitled to all compensation earned prior to termination. The required timing of this payment differs from state to state and ranges from immediately upon involuntary termination to the time of the subsequent pay date. These earnings are subject to federal income tax withholding in the same manner as were the employee's prior earnings.

Changing the W-4 Form

Employees may need to change their W-4 Forms for a variety of reasons, including marriage, divorce, the birth of children, or change of job status for the employee or his/her spouse.

WARNING! For changes that either reduce the number of withholding allowances, or alter the status from *married* to *single*, the employee is required to complete a new W-4 Form within 10 days. No time limit exists for other changes; the employee may submit a new W-4 Form for other changes at his/her discretion.

When an updated W-4 Form is submitted by the employee, the employer must process the change (and therefore adjust the federal income tax withholding) no later than the start of the first payroll period that ends at least 30 days after submission of the new form. Although there is no limit to the number of W-4 Form changes that may be submitted by an employee, this time frame over which an employer is permitted to implement the change effectively limits the total number of changes that can be processed in a given year.

TIP! Accepting an updated W-4 Form is not optional for an employer. New W-4 Forms resulting from circumstances described earlier must be processed by the employer.

Case in Point 3-3

Determine Timing of Employer Responsibilities

For each of the following circumstances, determine the date on which the referenced action must take place:

1. Samuel Wildhorn's divorce was finalized on Sunday, June 9. When must he submit a revised W-4 Form to his employer?

When an employee's divorce is finalized, that employee has 10 days to provide the employer with a revised W-4 Form. Therefore, Samuel must furnish a new W-4 Form no later than Wednesday, June 19.

2. Maggie Yang decides on Monday, March 4, that she would like to increase her number of federal withholding allowances from three to five. When must she submit a revised W-4 Form to her employer?

In this instance, there is no time limit for submitting a new W-4 Form, as this is not one of the circumstances under which notification must be made within 10 days. Maggie is free to submit the new form whenever she would like.

3. Brandon Rosenberg decides on Tuesday, October 15, that he would like to reduce his number of federal withholding allowances from five to three. He makes this change on a revised W-4 Form and submits it on Friday, October 18. Brandon is compensated on a semimonthly basis (at the middle and end of each month), and receives his paycheck five days after the end of each pay period. By which pay date must this change be in effect?

The next two pay periods that end after submission of the new form have end dates of October 31 and November 15, neither of which is 30 days after submission. The pay period ending on November 30 is the first pay period that ends at least 30 days after submission; therefore, the W-4 Form must be processed prior to the beginning of this pay period (which starts on November 16). The associated pay date, which is five days after the end of the period, is December 5. The W-4 Form change must be in effect for this pay date.

State Income Tax Withholding

On the Web

sba.gov/business-guide/manage-your-business/pay-taxes



In addition to federal income tax withholding, the majority of employees are also subject to state income tax withholding. These taxes are calculated based on state taxable income, which in many states is the same as federal taxable income.

As was noted previously, nine states do not collect state income tax on employee taxable income. The tax rates imposed in the other 41 states vary widely from one to the next. Furthermore, while some states levy a flat tax on all employee earnings, others levy a graduated tax, which increases as the employee's earnings increase. Refer to your eLab course or Appendix C for links to state taxing authorities in each of the 50 states, in addition to all United States territories. Further details regarding each state's specific withholding tax provisions can be found there. You may also refer to Appendix D for State Tax/Revenue Department addresses.

Due to the variability in state income tax withholding rates and methods, we will utilize a flat 5% state tax rate throughout the textbook.

Local Income Tax Withholding

In addition to both federal and state income tax withholding, employees living and/or working in certain jurisdictions are subject to local income tax withholding. These taxes vary widely in terms of the tax rates applied and the form in which the taxes are levied. For example, some local jurisdictions (such as cities or towns) impose local income tax withholding as a percentage of gross pay, whereas others do so as a percentage of federal or state income tax withholding, while still others impose a simple flat tax (specific, identical dollar amount for each employee) on a weekly basis.

Local jurisdictions may also elect to impose different local income tax withholding on residents and nonresidents. The justification for this practice is that residents utilize the services of the jurisdiction to a greater extent than nonresidents and therefore should bear a greater tax burden.

Case in Point 3-4

Calculate State and Local Income Tax Withholding

For each of the following employees, calculate the applicable state and local income tax withholding.

Before You Begin: Assume a state income tax withholding rate of 5% of taxable earnings.

1. Julio Ordonez earned gross pay of \$847, all of which is taxable for state and local income tax withholding. The city in which he both lives and works levies a tax of 2% of an employee's gross pay.

State income tax withholding for this employee is \$42.35 ($\$847 \text{ gross pay} \times 5\% \text{ state tax rate}$). Local income tax withholding is \$16.94 ($\$847 \text{ gross pay} \times 2\% \text{ local tax rate}$).

2. Alyona Gaponovitch earned gross pay of \$1,620. Of this amount, \$1,598 is taxable for state and local income tax withholding. The city in which she works (she lives elsewhere) levies a tax of 1.5% of an employee's gross pay on residents and 0.8% of an employee's gross pay on nonresidents.

State income tax withholding for this employee is \$79.90 ($\$1,598 \text{ taxable pay} \times 5\% \text{ state tax rate}$). Local income tax withholding is based on a rate of 0.8%, as Alyona is a nonresident. Therefore, her local income tax withholding is \$12.78 ($\$1,598 \text{ taxable pay} \times 0.8\% \text{ local tax rate}$).

3. Lucy Farmington earned gross pay of \$1,100. Of this amount, \$1,065 is taxable for state and local income tax withholding. The city in which she lives and works levies a tax of 2.1% of an employee's gross pay on residents and 0.5% of an employee's gross pay on nonresidents.

State income tax withholding for this employee is \$53.25 ($\$1,065 \text{ taxable pay} \times 5\% \text{ state tax rate}$). Local income tax withholding is based on a rate of 2.1%, as Lucy is a resident. Therefore, her local income tax withholding is \$22.37 ($\$1,065 \text{ taxable pay} \times 2.1\% \text{ local tax rate}$).

4. Gabrielle Fernandez earned weekly gross pay of \$740, all of which is taxable for state and local income tax withholding. The city in which she lives and works levies a tax of \$10/week on employees who work within city limits.

State income tax withholding for this employee is \$37 ($\$740 \text{ taxable pay} \times 5\% \text{ state tax rate}$). Local income tax withholding is unrelated to Gabrielle's gross pay and is \$10.

The Payroll Register

As you saw in the last chapter, the payroll register is completed based on the earnings and deductions that are subsequently transferred to the employee earnings records. Note that the city of Rochester, NY, in which Lucky Ties Apparel is located, does not levy local income tax withholding. As a result, there is no column in either the employee earnings record or the payroll register in which local income tax withholding can be entered. Both of these forms may be modified by the employer in this manner to suit a company's circumstance.

As with the employee earnings record, the payroll register columns can be modified to add columns for such voluntary deductions as health insurance and union dues.

| Payroll Register | | | | | | | | | | | | | | | |
|------------------|---------------|--------------|------------------|----------------|---------------|-------------------|----------------|------------|-----|-----------------|----------|-------------|--------------|---------|------------|
| Pay Period _____ | | | | | | | | | | | | | | | |
| Pay Date _____ | | | | | | | | | | | | | | | |
| Employee Name | Earnings | | | | | | | Deductions | | | | | Check Number | Net Pay | |
| | Regular Hours | Regular Rate | Regular Earnings | Overtime Hours | Overtime Rate | Overtime Earnings | Total Earnings | FWT | SWT | Social Security | Medicare | Health Ins. | | | Union Dues |
| | | | | | | | | | | | | | | | |
| Totals: | | | | | | | | | | | | | | | |

Case in Point 3-5

Complete a Payroll Register

In this example, we'll complete a payroll register for Lucky Ties Apparel. Earlier we calculated the federal income tax withholding for five different employees of Lucky Ties Apparel. Their federal withholding tax for the most recent week has been entered into the payroll register below (federal income tax withholding for Angelo Dorsett and Melissa Kubiak differ slightly from earlier calculations, as Lucky Ties Apparel has elected to use the wage-bracket method for all employees).

Additionally, the federal income tax withholding for three other employees (whose earnings were determined in the last chapter) has been entered within the payroll register below. The state income tax withholding has been completed for all employees based on the previously assumed 5% tax rate. Based on the payroll register, we will complete a portion of the deductions section of each employee earnings record.

Assume that any deductions that are exempt from federal income tax withholding are also exempt from state income tax withholding. Further note that Lucy Marshall has requested that a voluntary deduction of 8% of gross earnings be contributed to a 401(k) retirement plan.

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| Payroll Register | | | | | | | | | | | | | | | | |
|------------------|---------------|--------------|------------------|----------------|---------------|-------------------|----------------|------------|-----------|-----------------|----------|------------|--|--|--------------|---------|
| Pay Period | | 12/1/2019 | | | | | | | | | | | | | | |
| Pay Date | | 12/5/2019 | | | | | | | | | | | | | | |
| Employee Name | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay |
| | Regular Hours | Regular Rate | Regular Earnings | Overtime Hours | Overtime Rate | Overtime Earnings | Total Earnings | FWT | SWT | Social Security | Medicare | Vol. With. | | | | |
| Rogers, P | 35 | \$ 11.50 | \$ 402.50 | 0 | n/a | \$ - | \$ 402.50 | \$ 23.00 | \$ 18.52 | | | | | | | |
| Sherman, M | n/a | n/a | \$ 769.23 | 0 | n/a | \$ - | \$ 769.23 | \$ 61.00 | \$ 38.46 | | | | | | | |
| Novak, B | 40 | \$ 14.75 | \$ 590.00 | 6 | \$ 22.50 | \$ 135.00 | \$ 725.00 | \$ 13.00 | \$ 34.08 | | | | | | | |
| Dorsett, A | 40 | \$ 17.50 | \$ 700.00 | 7 | \$ 26.25 | \$ 183.75 | \$ 883.75 | \$ 63.00 | \$ 39.77 | | | | | | | |
| Kubiak, M | 40 | \$ 15.00 | \$ 600.00 | 1 | \$ 22.50 | \$ 22.50 | \$ 622.50 | \$ 7.00 | \$ 31.13 | | | | | | | |
| Martin, S | 40 | \$ 21.15 | \$ 846.00 | 11 | \$ 31.73 | \$ 349.03 | \$ 1,195.03 | \$ 90.00 | \$ 59.75 | | | | | | | |
| Marshall, L | 40 | \$ 15.75 | \$ 630.00 | 9 | \$ 23.63 | \$ 212.67 | \$ 842.67 | \$ 51.00 | \$ 38.76 | | | | | | | |
| McHenry, D | 40 | \$ 15.30 | \$ 612.00 | 5 | \$ 22.95 | \$ 114.75 | \$ 726.75 | \$ 2.00 | \$ 36.34 | | | | | | | |
| Totals: | | | \$ 5,149.73 | | | \$ 1,017.70 | \$ 6,167.43 | \$ 310.00 | \$ 296.81 | | | | | | | |

Note that totals for the FWT and SWT columns have been calculated within the payroll register. As was done in the previous chapter when transferring earnings amounts, all federal income tax withholding and state income tax withholding figures from the payroll register are now transferred to the employee earnings records.

| Employee Earnings Record | | | | | | | | | | | | | | | | |
|--------------------------|----------------------|---|---------------|-----------------------|-------------------|----------------|--------------------------|-------------------------|-----------------------|---------------------|--------------|-------------------------|----------------|-------------------------|--------------|---------|
| Name | | Paul Rogers | | | | | Marital Status | | | Single | | | | | | |
| Address | | 657 Flicker Lane Brockport, NY 14420 | | | | | Fed. Withholding Allow. | | | 1 | | | | | | |
| SS# | | 111-11-1111 | | | | | State Withholding Allow. | | | 1 | | | | | | |
| Pay Period Ending | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay |
| | Regular Hours Worked | Regular Pay Rate | Regular Wages | Overtime Hours Worked | Overtime Pay Rate | Overtime Wages | Gross Pay | Federal Withholding Tax | State Withholding Tax | Social Security Tax | Medicare Tax | Retirement Contribution | Life Insurance | Charitable Contribution | | |
| 12/1/19 | 35 | \$ 11.50 | \$ 402.50 | 0 | n/a | \$ - | \$ 402.50 | \$ 23.00 | \$ 18.52 | | | | | | | |

| Employee Earnings Record | | | | | | | | | | | | | | | | |
|--------------------------|----------------------|---|---------------|-----------------------|-------------------|----------------|--------------------------|-------------------------|-----------------------|---------------------|--------------|-------------------------|----------------|-------------------------|--------------|---------|
| Name | | Maryanne Sherman | | | | | Marital Status | | | Single | | | | | | |
| Address | | 8171 Winston Court Rochester, NY 14604 | | | | | Fed. Withholding Allow. | | | 2 | | | | | | |
| SS# | | 222-22-2222 | | | | | State Withholding Allow. | | | 1 | | | | | | |
| Pay Period Ending | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay |
| | Regular Hours Worked | Regular Pay Rate | Regular Wages | Overtime Hours Worked | Overtime Pay Rate | Overtime Wages | Gross Pay | Federal Withholding Tax | State Withholding Tax | Social Security Tax | Medicare Tax | Retirement Contribution | Life Insurance | Charitable Contribution | | |
| 12/1/19 | n/a | n/a | \$ 769.23 | 0 | n/a | \$ - | \$ 769.23 | \$ 61.00 | \$ 38.46 | | | | | | | |

Employee Earnings Record

Name Bill Novak Marital Status Married
 Address 536A North Yellow Lake Avenue Fed. Withholding Allow. 4
Hamlin, NY 14464 State Withholding Allow. 3
 SS# 333-33-3333

| Pay Period Ending | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay | |
|-------------------|----------------------|------------------|---------------|-----------------------|-------------------|----------------|-----------|-------------------------|-----------------------|---------------------|--------------|-------------------------|----------------|-------------------------|--------------|---------|------------------------|
| | Regular Hours Worked | Regular Pay Rate | Regular Wages | Overtime Hours Worked | Overtime Pay Rate | Overtime Wages | Gross Pay | Federal Withholding Tax | State Withholding Tax | Social Security Tax | Medicare Tax | Retirement Contribution | Life Insurance | Charitable Contribution | | | Additional Withholding |
| 12/1/19 | 40 | \$ 14.75 | \$ 590.00 | 6 | \$ 22.50 | \$ 135.00 | \$ 725.00 | \$ 13.00 | \$ 34.08 | | | | | | | | |

Employee Earnings Record

Name Angelo Dorsett Marital Status Single
 Address 400 Hillside Court Fed. Withholding Allow. 2
Hilton, NY 14468 State Withholding Allow. 2
 SS# 444-44-4444

| Pay Period Ending | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay | |
|-------------------|----------------------|------------------|---------------|-----------------------|-------------------|----------------|-----------|-------------------------|-----------------------|---------------------|--------------|-------------------------|----------------|-------------------------|--------------|---------|------------------------|
| | Regular Hours Worked | Regular Pay Rate | Regular Wages | Overtime Hours Worked | Overtime Pay Rate | Overtime Wages | Gross Pay | Federal Withholding Tax | State Withholding Tax | Social Security Tax | Medicare Tax | Retirement Contribution | Life Insurance | Charitable Contribution | | | Additional Withholding |
| 12/1/19 | 40 | \$ 17.50 | \$ 700.00 | 7 | \$ 26.25 | \$ 183.75 | \$ 883.75 | \$ 63.00 | \$ 39.77 | | | | | | | | |

Employee Earnings Record

Name Melissa Kubiak Marital Status Married
 Address 254 Cheesehead Drive Fed. Withholding Allow. 4
Pittsford, NY 14534 State Withholding Allow. 4
 SS# 555-55-5555

| Pay Period Ending | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay | |
|-------------------|----------------------|------------------|---------------|-----------------------|-------------------|----------------|-----------|-------------------------|-----------------------|---------------------|--------------|-------------------------|----------------|-------------------------|--------------|---------|------------------------|
| | Regular Hours Worked | Regular Pay Rate | Regular Wages | Overtime Hours Worked | Overtime Pay Rate | Overtime Wages | Gross Pay | Federal Withholding Tax | State Withholding Tax | Social Security Tax | Medicare Tax | Retirement Contribution | Life Insurance | Charitable Contribution | | | Additional Withholding |
| 12/1/19 | 40 | \$ 15.00 | \$ 600.00 | 1 | \$ 22.50 | \$ 22.50 | \$ 622.50 | \$ 7.00 | \$ 31.13 | | | | | | | | |

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Employee Earnings Record

Name Stacie Martin Marital Status Married
 Address 2 Lava Lane Fed. Withholding Allow. 2
Brockport, NY 14420 State Withholding Allow. 1
 SS# 666-66-6666

| Pay Period Ending | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay | |
|-------------------|----------------------|------------------|---------------|-----------------------|-------------------|----------------|-------------|-------------------------|-----------------------|---------------------|--------------|-------------------------|----------------|-------------------------|--------------|---------|------------------------|
| | Regular Hours Worked | Regular Pay Rate | Regular Wages | Overtime Hours Worked | Overtime Pay Rate | Overtime Wages | Gross Pay | Federal Withholding Tax | State Withholding Tax | Social Security Tax | Medicare Tax | Retirement Contribution | Life Insurance | Charitable Contribution | | | Additional Withholding |
| 12/1/19 | 40 | \$ 21.15 | \$ 846.00 | 11 | \$ 31.73 | \$ 349.03 | \$ 1,195.03 | \$ 90.00 | \$ 59.75 | | | | | | | | |

Employee Earnings Record

Name Lucy Marshall Marital Status Single
 Address 232 Muscle Road Fed. Withholding Allow. 3
Hamlin, NY 14464 State Withholding Allow. 2
 SS# 777-77-7777

| Pay Period Ending | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay | |
|-------------------|----------------------|------------------|---------------|-----------------------|-------------------|----------------|-----------|-------------------------|-----------------------|---------------------|--------------|-------------------------|----------------|-------------------------|--------------|---------|------------------------|
| | Regular Hours Worked | Regular Pay Rate | Regular Wages | Overtime Hours Worked | Overtime Pay Rate | Overtime Wages | Gross Pay | Federal Withholding Tax | State Withholding Tax | Social Security Tax | Medicare Tax | Retirement Contribution | Life Insurance | Charitable Contribution | | | Additional Withholding |
| 12/1/19 | 40 | \$ 15.75 | \$ 630.00 | 9 | \$ 23.63 | \$ 212.67 | \$ 842.67 | \$ 51.00 | \$ 38.76 | | | | | | | | |

Employee Earnings Record

Name Donald McHenry Marital Status Married
 Address 22 Iceberg Lane Fed. Withholding Allow. 6
Fairport, NY 14450 State Withholding Allow. 5
 SS# 888-88-8888

| Pay Period Ending | Earnings | | | | | | | Deductions | | | | | | | Check Number | Net Pay | |
|-------------------|----------------------|------------------|---------------|-----------------------|-------------------|----------------|-----------|-------------------------|-----------------------|---------------------|--------------|-------------------------|----------------|-------------------------|--------------|---------|------------------------|
| | Regular Hours Worked | Regular Pay Rate | Regular Wages | Overtime Hours Worked | Overtime Pay Rate | Overtime Wages | Gross Pay | Federal Withholding Tax | State Withholding Tax | Social Security Tax | Medicare Tax | Retirement Contribution | Life Insurance | Charitable Contribution | | | Additional Withholding |
| 12/1/19 | 40 | \$ 15.30 | \$ 612.00 | 5 | \$ 22.95 | \$ 114.75 | \$ 726.75 | \$ 2.00 | \$ 36.34 | | | | | | | | |

Self-Assessment

Complete the Self-Assessment as directed by your instructor, whether that is in the book, the Learning Resource Center (labyrinthlab.com/lrc), or your eLab course, if applicable.

True/False Questions

1. State income tax withholding must be deducted from gross pay for employees of every state. *True False*
2. Social Security tax is subject to an income threshold, and therefore is levied on an employee's wages only until he/she has earned more than the threshold level in a single year. *True False*
3. Taxable pay used to calculate federal income tax withholding can differ from taxable pay used to calculate Social Security tax. *True False*
4. The current pay-as-you-go system of remitting federal income tax withholding was established by the Current Tax Payment Act of 1943. *True False*
5. Employees who are exempt from federal income tax withholding are only required to verbally inform their employer of this status. *True False*
6. The number of federal withholding allowances impacts the withholding amount calculated under the wage-bracket method but not under the percentage method. *True False*
7. Employers who utilize quarterly pay periods must use the percentage method to determine federal income tax withholdings. *True False*
8. Employees are either subject to both federal and state income tax withholding or to neither of these. *True False*
9. State income tax withholding calculations differ from one state to another. *True False*
10. Because not all employees are subject to local income tax withholding, this amount never appears in the payroll register. *True False*

Multiple Choice Questions

11. Which of the following is not a mandatory deduction from gross pay?
 - A. Federal income tax withholding
 - B. Union dues
 - C. Social Security tax
 - D. Medicare tax
12. Which of the following was not a result of the Current Tax Payment Act of 1943?
 - A. Use of a pay-as-you-go system
 - B. Requirement that taxes no longer be paid in the year after the associated taxable pay is earned
 - C. Employer withholding of federal income tax
 - D. One federal income tax withholding rate that was consistent for all employees

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13. Which of the following is not a withholding table available for use with the wage-bracket method of calculating federal income tax withholding?
- A. Married; Biweekly
 - B. Single; Semimonthly
 - C. Single; Daily
 - D. Married; Semiannually
14. Under the wage-bracket method, what would the federal income tax withholding be for a married employee with three federal withholding allowances who has weekly taxable earnings of \$786?
- A. \$0
 - B. \$15
 - C. \$31
 - D. \$52
15. For which of the following employees may the wage-bracket method not be used?
- A. A single employee who claims 6 withholding allowances and earns weekly pay of \$1,047
 - B. A married employee who claims 11 withholding allowances and earns monthly pay of \$3,420
 - C. A single employee who claims 4 withholding allowances and earns biweekly pay of \$1,320
 - D. A married employee who claims 9 withholding allowances and earns semimonthly pay of \$3,350
16. When using the wage-bracket method, which of the following employees is subject to federal income tax withholding of \$0 for the specified period?
- A. A married employee who claims two withholding allowances and earns weekly pay of \$434
 - B. A single employee who claims one withholding allowance and earns weekly pay of \$40
 - C. A married employee who claims three withholding allowances and earns weekly pay of \$481
 - D. A single employee who claims two withholding allowances and earns weekly pay of \$252
17. Under the percentage method, what is the federal income tax withholding for a single employee with one federal withholding allowance who has biweekly taxable pay of \$862?
- A. \$24.35
 - B. \$49.36
 - C. \$59.08
 - D. \$71.56
18. When an employee gets a divorce, how many days does he/she have to file a new W-4 Form with his/her employer?
- A. 10
 - B. 30
 - C. 45
 - D. Unlimited
19. Which of the following statements about state income tax withholding is inaccurate?
- A. State income tax withholding is not levied in all 50 states.
 - B. Some states charge higher state income tax withholding to employees with high earnings, as compared with employees whose earnings are smaller.
 - C. State income tax withholding cannot be levied on an employee who is subject to local income tax withholding.
 - D. For those states that levy a flat state income tax withholding, the applicable rate varies from state to state.

20. Which of the following is not considered a municipality from which local income tax withholding could be levied?
- A. West Virginia
 - B. Manhattan
 - C. San Francisco
 - D. Yonkers

Practice Set A

The IRS forms and Excel templates needed for these assignments are included in the Student Exercise Files download for this course. If directed to do so, complete these assignments in Homework Grader.

PSa 3-1 Identify Deductions

For each of the deductions listed, indicate whether it is a mandatory deduction or a voluntary deduction:

1. Medicare tax
2. State income tax withholding
3. Union dues
4. Federal income tax withholding
5. Medical plans

PSa 3-2 Calculate Gross Pay and Taxable Pay

For each employee, first calculate gross pay. Then determine taxable income used to calculate federal income tax withholding, Social Security tax, and Medicare tax.

1. An employee works 47 hours (seven were overtime hours) during a workweek in December of 2019. He earns \$39/hour, with his employer paying 1.5 times the regular rate of pay for overtime hours. To date, he has earned \$131,050 during the year. He has requested that his employer withhold 6% of gross pay, which is to be contributed to a 401(k) plan.
2. An employee works 39 regular hours during a workweek in August of 2019. He was hired six years ago, earns a salary of \$116,500/year, and is exempt from the overtime provisions of the FLSA. To date, he has received no compensation beyond his annual salary. He has requested that his employer withhold 12% of gross pay, which is to be contributed to a 403(b) plan.
3. An employee works 51 hours (11 were overtime hours) during a workweek in December of 2019. He earns \$10,000/month, with his employer paying 1.5 times the regular rate of pay for overtime hours. To date, he has earned \$134,200 during the year. He has requested that his employer withhold 9% of gross pay, which is to be contributed to a 401(k) plan.

PSa 3-3 Calculate Federal Income Tax Withholding Using the Wage-Bracket Method

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use the wage-bracket method to calculate federal income tax withholding:

1. Sam Coleridge (married; four federal withholding allowances) earned weekly gross pay of \$565.
2. Michael Kolk (single; two federal withholding allowances) earned biweekly gross pay of \$975. He participates in a flexible spending account, to which he contributed \$100 during the period.
3. Anita McLachlan (single; no federal withholding allowances) earned monthly gross pay of \$2,440. For each period, she makes a 401(k) contribution of 9% of gross pay.
4. Stacey Williamson (married; three federal withholding allowances) earned semimonthly gross pay of \$1,250. She participates in a cafeteria plan, to which she contributed \$150 during the period.

PSa 3-4 Calculate Federal Income Tax Withholding Using the Percentage Method

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use the percentage method to calculate federal income tax withholding:

1. Billy Rainer (married; two federal withholding allowances) earned weekly gross pay of \$602.
2. Angel Rodriguez (married; three federal withholding allowances) earned biweekly gross pay of \$1,020. He participates in a flexible spending account, to which he contributed \$50 during the period.
3. Julie Smithers (single; two federal withholding allowances) earned monthly gross pay of \$2,170. For each period, she makes a 401(k) contribution of 10% of gross pay.
4. Anna Marquez (single; no federal withholding allowances) earned semimonthly gross pay of \$1,700. She participates in a cafeteria plan, to which she contributed \$110 during the period.

PSa 3-5 Calculate Federal Income Tax Withholding Using Two Methods

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use both the wage-bracket method and the percentage method to calculate federal income tax withholding. Show all work for each method.

1. Thomas Fortuna (married; four federal withholding allowances) earned weekly gross pay of \$745. For each period, he makes a 401(k) retirement plan contribution of 10% of gross pay.
2. Barbara Houlihan (single; one federal withholding allowance) earned daily gross pay of \$320. For each period, she makes a 401(k) contribution of 12% of gross pay.
3. Marcus Xavier (married; five federal withholding allowances) earned monthly gross pay of \$3,650. He participates in a flexible spending account, to which he contributed \$200 during the period.

PSa 3-6 Calculate Federal (Wage-Bracket Method), State, and Local Income Tax Withholding

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use the wage-bracket method to calculate federal income tax withholding. Then calculate both the state income tax withholding (assuming a state tax rate of 5% of taxable pay, with taxable pay being the same for federal and state income tax withholding), and the local income tax withholding.

1. Paul Bronson (single; one federal withholding allowance) earned weekly gross pay of \$1,247. For each period, he makes a 401(k) retirement plan contribution of 10% of gross pay. The city in which he works (he lives elsewhere) levies a tax of 1.5% of an employee's taxable pay (which is the same for federal and local income tax withholding) on residents, and 0.8% of an employee's taxable pay on nonresidents.
2. Stephen McPherson (married; five federal withholding allowances) earned weekly gross pay of \$980. He participates in a flexible spending account, to which he contributed \$75 during the period. The city in which he lives and works levies a tax of 2.3% of an employee's taxable pay (which is the same for federal and local income tax withholding) on residents, and 1.6% of an employee's taxable pay on nonresidents.
3. Tyler Howard (married; four federal withholding allowances) earned weekly gross pay of \$1,310. For each period, he makes a 403(b) retirement plan contribution of 7% of gross pay. The city in which he lives and works levies a tax of 1.4% of an employee's taxable pay (which is the same for federal and local income tax withholding) on both residents and nonresidents.
4. Alejandro Garcia (single; three federal withholding allowances) earned weekly gross pay of \$1,110. He participates in a cafeteria plan, to which he paid \$50 during the period. The city in which he works levies a tax of \$12/week on employees who work within city limits.

PSa 3-7 Calculate Federal (Percentage Method), State, and Local Income Tax Withholding

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use the percentage method to calculate federal income tax withholding. Then calculate both the state income tax withholding (assuming a state tax rate of 5% of taxable pay, with taxable pay being the same for federal and state income tax withholding), and the local income tax withholding.

1. Walter Ferrell (married; four federal withholding allowances) earned weekly gross pay of \$1,030. For each period, he makes a 401(k) retirement plan contribution of 14% of gross pay. The city in which he works (he lives elsewhere) levies a tax of 1.3% of an employee's taxable pay (which is the same for federal and local income tax withholding) on residents and 1.1% of an employee's taxable pay on nonresidents.
2. Lucas Sedaris (married; three federal withholding allowances) earned weekly gross pay of \$2,800. He participates in a flexible spending account, to which he contributed \$150 during the period. The city in which he lives and works levies a tax of 3.1% of an employee's taxable pay (which is the same for federal and local income tax withholding) on residents and 2.4% of an employee's taxable pay on nonresidents.
3. Darrell Roper (married; six federal withholding allowances) earned weekly gross pay of \$1,540. He does not request that any voluntary deductions be made from his gross pay. The city in which he lives and works levies a tax of 2.5% of an employee's taxable pay (which is the same for federal and local income tax withholding) on both residents and nonresidents.
4. Giuseppe Fortuna (single; two federal withholding allowances) earned weekly gross pay of \$3,820. He participates in a cafeteria plan, to which he paid \$175 during the period. The city in which he works levies a tax of \$13/week on employees who work within city limits.

PSa 3-8 Populate a Payroll Register

This problem is a continuation of exercise PSa 2-12 from Chapter 2.

Complete the Federal Withholding Tax (wage-bracket method) and State Withholding Tax columns of the payroll register for the five employees whose information was provided in PSa 2-4 and PSa 2-12. The state income tax withholding rate is 5% of taxable pay, with taxable pay being the same for federal and state income tax withholding. Additional information for each employee is provided below.

- Luisa Williams makes a 401(k) retirement plan contribution of 14% of gross pay each period.
- Jonathan Olsen participates in a cafeteria plan, to which he pays \$100 each period.
- Nathan Upton does not make any voluntary deductions each period.
- Juan Rodriguez makes a 403(b) retirement plan contribution of 13% of gross pay.
- Drew Painter participates in a flexible spending account, to which he contributes \$50 each period.

Although you will further modify the Voluntary Withholdings column in the next chapter, you should complete this column (along with the FWT and SWT columns) based on the information provided above.

PSa 3-9 Populate Employee Earnings Records

This problem is a continuation of exercise PSa 2-13 from Chapter 2.

Complete the Federal Income Tax Withholding (FWT) and State Income Tax Withholding (SWT) columns of the employee earnings records for the five employees from PSa 3-8. The earnings section of the employee earnings records was previously completed in PSa 2-13. Although you will further modify the Retirement Contribution and Additional Withholding columns in the next chapter, you should complete these columns (along with the FWT and SWT columns) based on the information provided in PSa 3-8.

Practice Set B

The IRS forms and Excel templates needed for these assignments are included in the Student Exercise Files download for this course. If directed to do so, complete these assignments in Homework Grader.

PSb 3-1 Identify Deductions

For each of the deductions listed, indicate whether it is a mandatory deduction or a voluntary deduction:

1. Cafeteria plans
2. Social Security tax
3. State disability insurance
4. Local income tax withholding
5. Retirement plans

PSb 3-2 Calculate Gross Pay and Taxable Pay

For each employee, first calculate gross pay. Then determine taxable income used to calculate federal income tax withholding, Social Security tax, and Medicare tax.

1. An employee works 42 hours (two were overtime hours) during a workweek in December of 2019. He earns \$40.50/hour, with his employer paying 1.5 times the regular rate of pay for overtime hours. To date, he has earned \$132,300 during the year. He has requested that his employer withhold 7% of gross pay to contribute to a 403(b) plan.
2. An employee works 37 regular hours during a workweek in August of 2019. He was hired four years ago, earns a salary of \$135,100/year, and is exempt from the overtime provisions of the FLSA. To date, he has received no compensation beyond his annual salary. He has requested that his employer withhold 8% of gross pay to contribute to a 401(k) plan.

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3. An employee works 50 hours (10 of which were overtime hours) during a workweek in December of 2019. He earns \$9,500/month, with his employer paying 1.5 times the regular rate of pay for overtime hours. To date, he has earned \$109,700 during the year. He has requested that his employer withhold 13% of gross pay to contribute to a 403(b) plan.

PSb 3-3 Calculate Federal Income Tax Withholding Using the Wage-Bracket Method

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use the wage-bracket method to calculate federal income tax withholding:

1. Paul Yount (married; seven federal withholding allowances) earned weekly gross pay of \$605.
2. Paulina Robinson (single; three federal withholding allowances) earned biweekly gross pay of \$1,245. She contributed \$75 to a flexible spending account during the period.
3. Lacey Kunis (single; two federal withholding allowances) earned monthly gross pay of \$3,090. For each period, she makes a 401(k) contribution of 18% of gross pay.
4. Francine Stewart (married; four federal withholding allowances) earned semimonthly gross pay of \$1,420. She contributed \$125 to a cafeteria plan during the period.

PSb 3-4 Calculate Federal Income Tax Withholding Using the Percentage Method

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use the percentage method to calculate federal income tax withholding:

1. Juan Hoffman (single; two federal withholding allowances) earned weekly gross pay of \$445.
2. William Harrison (single; one federal withholding allowance) earned biweekly gross pay of \$990. He contributed \$75 to a flexible spending account during the period.
3. Loretta Goulet (married; three federal withholding allowances) earned monthly gross pay of \$2,800. For each period, she makes a 401(k) contribution of 14% of gross pay.
4. Louise Simpson (married; nine federal withholding allowances) earned semimonthly gross pay of \$2,300. She contributed \$100 to a cafeteria plan during the period.

PSb 3-5 Calculate Federal Income Tax Withholding Using Two Methods

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use both the wage-bracket method and the percentage method to calculate federal income tax withholding. Show all work for each method.

1. Warren Cavanagh (single; no federal withholding allowances) earned weekly gross pay of \$620. For each period, he makes a 401(k) retirement plan contribution of 5% of gross pay.
2. Stacey Vaughn (married; four federal withholding allowances) earned daily gross pay of \$275. For each period, she makes a 401(k) contribution of 8% of gross pay.
3. Jordan Peters (single; three federal withholding allowances) earned monthly gross pay of \$2,300. He contributed \$150 to a flexible spending account during the period.

PSb 3-6 Calculate Federal (Wage-Bracket Method), State, and Local Income Tax Withholding

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use the wage-bracket method to calculate federal withholding tax. Then calculate both the state withholding tax (assuming a state tax rate of 5% of taxable pay, with taxable pay being the same for federal and state income tax withholding) and the local withholding tax.

1. Jay Monroe (single; two federal withholding allowances) earned weekly gross pay of \$1,145. For each period, he makes a 401(k) retirement plan contribution of 12% of gross pay. The city in which he works (he lives elsewhere) levies a tax of 2% of an employee's taxable pay (which is the same for federal and local income tax withholding) on residents and 1.7% of an employee's taxable pay on nonresidents.
2. Gus Damon (married; nine federal withholding allowances) earned weekly gross pay of \$1,200. He contributed \$125 to a flexible spending account during the period. The city in which he lives and works levies a tax of 3% of an employee's taxable pay (which is the same for federal and local income tax withholding) on residents and 0.4% of an employee's taxable pay on nonresidents.
3. Kenneth Riley (single; no federal withholding allowances) earned weekly gross pay of \$1,000. For each period, he makes a 403(b) retirement plan contribution of 5% of gross pay. The city in which he lives and works levies a tax of 1.7% of an employee's taxable pay (which is the same for federal and local income tax withholding) on both residents and nonresidents.
4. Ross McMichael (married; two federal withholding allowances) earned weekly gross pay of \$970. He paid \$60 to a cafeteria plan during the period. The city in which he works levies a tax of \$8/week on employees who work within city limits.

PSb 3-7 Calculate Federal (Percentage Method), State, and Local Income Tax Withholding

Refer to Appendix A, 2019 Federal Tax Tables

For each employee listed, use the percentage method to calculate federal income tax withholding. Then calculate both the state income tax withholding (assuming a state tax rate of 5% of taxable pay, with taxable pay being the same for federal and state income tax withholding), and the local income tax withholding.

1. Armand Giroux (single; no federal withholding allowances) earned weekly gross pay of \$1,500. For each period, he makes a 401(k) retirement plan contribution of 8% of gross pay. The city in which he works (he lives elsewhere) levies a tax of 1% of an employee's taxable pay (which is the same for federal and local income tax withholding) on residents and 0.6% of an employee's taxable pay on nonresidents.
2. Peter Quigley (married; eight federal withholding allowances) earned weekly gross pay of \$2,350. He contributed \$100 to a flexible spending account during the period. The city in which he lives and works levies a tax of 2.7% of an employee's taxable pay (which is the same for federal and local income tax withholding) on residents and 1.9% of an employee's taxable pay on nonresidents.
3. Eric Belanger (married; four federal withholding allowances) earned weekly gross pay of \$1,275. He does not request that any voluntary deductions be made from his gross pay. The city in which he lives and works levies a tax of 1.5% of an employee's taxable pay (which is the same for federal and local income tax withholding) on both residents and nonresidents.
4. Christopher Martin (single; four federal withholding allowances) earned weekly gross pay of \$2,780. He paid \$85 to a cafeteria plan during the period. The city in which he works levies a tax of \$7/week on employees who work within city limits.

PSb 3-8 Populate a Payroll Register

This problem is a continuation of exercise PSb 2-12 from Chapter 2.

Complete the Federal Withholding Tax (wage-bracket method) and State Withholding Tax columns of the payroll register for the five employees whose information was provided in PSb 2-4 and PSb 2-12. Note that the state income tax withholding rate is 5% of taxable pay, with taxable pay being the same for federal and state income tax withholding. Additional information for each employee is provided below:

- Jimmy Troffa makes a 401(k) retirement plan contribution of 9% of gross pay each period.
- Tyler Thomas pays \$75 to a cafeteria plan during each period.
- Ryan Brown does not make any voluntary deductions each period.
- Michael Kaminski makes a 403(b) retirement plan contribution of 10% of gross pay.
- Tina Baldwin contributes \$110 to a flexible spending account each period.

Although you will further modify the Voluntary Withholdings column in the next chapter, you should complete this column (along with the FWT and SWT columns) based on the information provided above.

PSb 3-9 Populate Employee Earnings Records

This problem is a continuation of exercise PSb 2-13 from Chapter 2.

Complete the Federal Income Tax Withholding (FWT) and State Income Tax Withholding (SWT) columns of the employee earnings records for the five employees from PSb 3-8. Note that the earnings section of the employee earnings records was previously completed in PSb 2-13. Although you will further modify the Retirement Contribution and Additional Withholding columns in the next chapter, you should complete these columns (along with the FWT and SWT columns) based on the information provided in PSb 3-8.

Continuing Payroll Problem

The IRS forms and Excel templates needed for these assignments are included in the Student Exercise Files download for this course. If directed to do so, complete these assignments in Homework Grader.

CPP 3-1 Calculate and Document Federal and State Income Tax Withholding

Calculate federal and state income tax withholding for a number of employees of TCLH Industries, a manufacturer of cleaning products. Use the wage-bracket method when it is possible to do so, and use the percentage method in all other instances. Assume the state income tax withholding rate to be 5% of taxable pay (which is the same for federal and state income tax withholding). Then, continue to fill out the payroll register and the employee earnings records based on your calculations.

1. Calculate the federal and state income tax withholdings for each employee based on information from the prior chapters' Continuing Payroll Problem, as well as the following:
 - Zachary Fox does not make any voluntary deductions that impact earnings subject to federal income tax withholding.
 - Calvin Bell makes a 401(k) retirement plan contribution of 6% of gross pay.
 - David Alexander makes a 401(k) retirement plan contribution of 12% of gross pay.
 - Michael Sierra contributes \$50 to a flexible spending account each period.
2. Complete the Federal (FWT) and State (SWT) Income Tax Withholding columns of the payroll register (which you established during an earlier Continuing Payroll Problem) for TCLH Industries. Note that although the Voluntary Withholdings column will require additional updating in subsequent chapters, you should populate this column with any appropriate figures given above. Then complete the Federal and State Withholding Tax columns of the employee earnings record (which you established during an earlier Continuing Payroll Problem) for each of the four employees of TCLH Industries. Also complete the Retirement Contribution and Additional Withholding columns based on the information provided. The Additional Withholding column will require further updating in the next chapter.

Critical Thinking

CT 3-1 Investigate Federal Withholding Allowances

As you have seen, the number of federal withholding allowances claimed by an employee has a significant impact on the amount of federal income tax withheld from each paycheck. In Chapter 1 you examined the W-4 Form and learned that an employee claims his/her desired number of federal withholding allowances on this form. But how does an employee determine the optimal number of allowances? While the Personal Allowances Worksheet, which you reviewed in Chapter 1, provides guidance on this topic, an employee may still choose to alter the suggested number of allowances from this worksheet. In this exercise, you will use the Internet to research common reasons why employees may choose to either increase or decrease the number of allowances claimed.

Begin by researching different reasons why an employee may choose to alter his/her number of federal withholding allowances. Next, write a paragraph of at least five sentences, in which you discuss the two most compelling reasons you identified for reducing the number of allowances. Then, write a second paragraph of at least five sentences, in which you discuss the two most compelling reasons you identified for increasing the number of allowances.

Submit your final file based on the guidelines provided by your instructor.

CT 3-2 Examine State Income Tax Withholding

Earlier you learned that, as of 2019, nine states do not levy state income tax withholdings on their residents. Two of these (New Hampshire and Tennessee) collect tax on dividend and interest income, but how do the other seven states (Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming) raise funds to run government operations? In this exercise, you will use the Internet to research the manner in which some of these states generate revenues.

Select three of the seven states listed above to research. If you either live or work in one of these states, include it in your selection. Use the Internet to research the alternative methods utilized by these states to generate funds. These may include different tax types, state-specific revenue-generating activities, or other methods. For each state, write a paragraph of at least four sentences in which you discuss the manner in which these funds are raised.

Submit your final file based on the guidelines provided by your instructor.