5. Let $A$ represent the number of the paycheck for the year. For example, if the paycheck was the fifth of the year, $A$ is 5 . Let $B$ represent the biweekly gross pay. Let $C$ represent the biweekly union dues contribution. Let $D$ represent the biweekly health insurance deduction. Let $E$ represent the biweekly retirement plan contribution
a. Write an expression for the calendar year-to-date gross pay.
b. Write an expression for the pay period Social Security tax.
c. Write an expression for the calendar year-to-date Social Security tax (assume that the maximum will not be met).
d. Write an expression for the pay period Medicare tax.
e. Write an expression for the calendar year-to-date Medicare tax.
f. Write an expression for the calendar year-to-date union dues.
g. Write an expression for the calendar year-to-date health insurance deduction.
h. Write an expression for the calendar year-to-date retirement plan deduction.
i. Assume that the taxpayer pays $21 \%$ federal taxes. Write an expression for the pay period federal tax deduction.
j. Assume that the taxpayer pays $11 \%$ state taxes. Write an expression for the state tax deduction for a pay period.
k. Write an algebraic expression that represents the net pay for this pay period.
6. Complete the missing entries in the following pay stub.

| EARNINGS |  |  |
| :--- | :---: | ---: |
| PERIOD | AMOUNT | YTD AMOUNT |
| WEEKLY -\#18 | a. | $\$ 21,510$ |
| DEDUCTIONS |  |  |
| TAX TYPE | AMOUNT | YTD AMOUNT |
| Social Security | b. | c. |
| Medicare | d. | e. |
| Federal Tax | $\$ 322.65$ | $\$ 5,807.70$ |
| State Tax |  | $\$ 3,441.60$ |
| ADJUSTMENTS | AMOUNT | YTD AMOUNT |
| ITEM | f. | $\$ 216.00$ |
| Union Dues | $\$ 23.95$ | g. |
| Family Health Ins. |  |  |

a. As indicated in the paycheck number box, this is the 18 th paycheck of the year. Determine the current gross pay.
b. What is the Social Security tax for this pay period?
c. What is the year-to-date Social Security tax?
d. What is the Medicare tax for this pay period?
e. What is the year-to-date Medicare tax?
f. What are the union dues for this pay period if it is paid weekly?
g. What is the year-to-date health insurance contribution if it is paid weekly?
h. What is the state tax rate?
i. What is the federal tax rate?
check to his tax deferred by contributing $\$ 350$ per biweekly paypaycheck to his FSA. How much ent account and $\$ 50$ per biweekly taxes by if his gross biweekly pay is he reduce his annual federal
8. Examine this portion of a taxpayer's W-2 form. Assume that the taxpayer's wages for the year are under the Social Security limit. What entry should be in Box 1 ?

| Safe, accurate, <br> FAST! Use | Visit the IRS website at www.irs.gov/efile. |
| :---: | :---: |
| 1 Wages, tips, other compensation | 2 Federal income tax withheld |
| 3 Social security wages | 4 Social security tax withheld \$4,789.81 |
| 5 Medicare wages and tips | 6 Medicare tax withheld |
| 7 Social security tips | 8 Allocated tips |
| 9 Advance EIC payment | 10 Dependent care benefits |

10. Determine the correct entry for Box 4 .

11. Let the Medicare tax withheld in Box 6 be represented by $x$ as shown. Write an algebraic expression that represents the federal income tax withheld assuming that the taxpayer pays $28 \%$ of his income in federal taxes and that there are no tax deferred entries for the year.

12. Determine the correct entry for Box 1 assuming that the taxpayer pays $33 \%$ of his total income in federal taxes.

13. Martina is taxed at a rate of $25 \%$ for her federal taxes. Last year, she reduced her taxable income by contributing to a flexible savings plan in the amount of $\$ 2,700$. If her wages before the deduction were $\$ 68,000$, how much did she save in federal taxes by using the FSA?
14. Laurel's W-2 form reported total Medicare wages as $\$ 100,750$. She contributed $\$ 30$ per weekly paycheck to her FSA and $\$ 75$ per weekly paycheck to her retirement plan. She received a 1099 form from her bank for her savings account interest in the amount of $\$ 690$ and a 1099 form from an employer that she did some consulting work for in the amount of $\$ 2,600$. What is Laurel's taxable income?
