## Deductions and Net Pay

## NEW SKILLS: WORKING WITH NET INCOME

taxable income:
income after before-tax deductions have been applied, on which federal and provincial taxes are paid
net income: income after all taxes and other deductions have been applied; also called takehome pay

Some deductions are taxable, and some are not. For example, union dues and company pension plans are before-tax deductions, and so they are not subject to federal and provincial taxes.

Deductions are amounts of money taken off your gross pay for income tax (federal and provincial or territorial), union dues, disability insurance, employment insurance (EI), pension plans (including the Canada Pension Plan or CPP), and health or other benefits. Income tax is paid on your taxable income.

Each paycheque should list your gross pay, all deductions, and your net income. At the end of the year, your employer will supply you with a T4 slip that you will use to prepare your income tax return.

For more details, see page 79 of MathWorks 10.

## Example 1

John's group life insurance is $1.5 \%$ of his salary of $\$ 450.00$ every two weeks. How much does he pay for group life insurance?

## SOLUTION

Change $1.5 \%$ to a decimal and multiply by his salary.

$$
\begin{aligned}
1.5 \div 100 & = \\
& \times \$ 450.00=
\end{aligned}
$$

He pays $\qquad$ for group life insurance per paycheque.

## BUILD YOUR SKILLS

1. If the federal tax rate is $15 \%$, how much is deducted from your $\$ 750.00$ paycheque?

Income tax rates vary with province or territory,
salary, and family circumstances.
2. If your short-term disability insurance rate is $0.5 \%$, what do you pay if your paycheque is $\$ 300.00$ ?
3. If your Canada Pension Plan (CPP) contribution rate is $4.95 \%$ and your salary is $\$ 1578.00$ every two weeks, what will be the CPP deduction?

## Example 2

Jaar had a gross income of $\$ 785.00$. His net income was $\$ 625.42$. What percentage of his gross pay were his deductions?

## solution

Calculate the amount of the deductions by subtracting his net income from his gross income.
$\$ 785.00-\$ 625.42=$ $\qquad$

Calculate what percentage $\$$ $\qquad$ is of $\$ 785.00$.
$\qquad$ $\div$ $\qquad$ $\approx$
$\qquad$
$\times 100=$ \%

His deductions are about $\qquad$ \% of his gross pay.

## BUILD YOUR SKILLS

4. Samara's monthly taxable income was $\$ 3276.54$. If she paid $\$ 757.24$ in taxes, what percentage of her taxable income did she pay?
5. Patricia's before-tax deductions amounted to $\$ 75.47$ on a gross salary of $\$ 700.00$.
a) If she paid $\$ 93.68$ in federal tax, what is her tax rate?
b) If she paid $\$ 36.85$ in territorial tax, what is her tax rate?
6. Hans paid $\$ 37.51$ Employment Insurance (EI) on his taxable monthly income of $\$ 2168.21$. What is the EI rate?

## Example 3

Alphonso has a gross income of $\$ 852.00$ per week. His before-tax deductions include union dues of $2.5 \%$ of his gross income and a company pension plan contribution of $3 \%$. His federal tax rate is $16.2 \%$ and his provincial tax rate is $5.4 \%$. He pays $4.95 \%$ to the CPP and $1.8 \%$ for EI. Calculate his net income.

## SOLUTION

Calculate Alphonso's taxable income by subtracting his union dues and his company pension from his gross income.

First, calculate the amount of his union dues and company pension.
Union dues:

$$
\begin{aligned}
& 2.5 \div 100=0.025 \\
& 0.025 \times \$ 852.00= \\
&
\end{aligned}
$$

Company pension:

$$
3 \div 100=0.03
$$

$0.03 \times \$ 852.00=$ $\qquad$
Next, subtract these amounts from his gross income to find his taxable income.
$\$ 852.00-\left(ـ_{\sim}+\ldots\right)=$
Calculate the amount of taxes, CPP, and EI using his taxable income.
Federal tax:

$$
\begin{aligned}
16.2 \div 100 & =0.162 \\
0.162 \times \$ 805.14 & =\$
\end{aligned}
$$

Provincial tax:
$5.4 \div 100=0.054$
$0.054 \times \$ 805.14=$ $\qquad$
CPP:

$$
\begin{aligned}
& 4.95 \div 100=0.0495 \\
& 0.0495 \times \$ 805.14= \\
& \hline
\end{aligned}
$$

EI:
$1.8 \div 100=0.018$
$0.018 \times \$ 805.14=\$$ $\qquad$
Alphonso's net income will be his taxable income minus these deductions.
\$805.14 - $\qquad$ - $\qquad$ - $\qquad$
$\qquad$
Alphonso's net income will be $\qquad$ .

## BUILD YOUR SKILLS

7. Randy works at two jobs. In one job, he earns $\$ 325.00 /$ week, and has deductions of $\$ 56.67$ federal tax, $\$ 13.12$ provincial tax, $\$ 16.09 \mathrm{CPP}$, and $\$ 4.14 \mathrm{EI}$. At his other job, he earns $\$ 567.00 /$ week and pays $\$ 79.42$ federal tax, $\$ 16.82$ provincial tax, and \$18.12 CPP. What is his net income?
8. As a part-time college instructor, Kathy teaches an introductory course on Mexican history. She has a biweekly gross income of $\$ 3654.75$. Her before-tax deductions include a short-term disability premium of $0.5 \%$, union dues of $3.1 \%$, and a pension amount of $4 \%$. If she pays federal tax at a rate of $18.5 \%$, provincial tax at a rate of $6.2 \%, \mathrm{CPP}$ at $4.95 \%$, and EI at $2.2 \%$, what is her net income?
9. Consider the following pay statement.

| Employee Name: Hank |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Company: |  | Pay Begin Date: 06/01/2010 |  |  | Net Pay: ??? |  |
|  |  | Pay End Date:06/15/2010 |  |  | Cheque Date: 06/15/2010 |  |
| General |  |  |  |  | Taxes Data |  |
| Employee ID: |  |  | Job Title: |  | Description | Federal |
| Address: |  |  | Pay Rate: Annual: | $\begin{aligned} & \$ 575.00 \\ & \$ 29900.00 \end{aligned}$ | Claim Code | 1 |
| Hours and Earnings |  |  |  |  | Taxes |  |
|  | Current |  |  |  | Description | Current |
| Description | Rate | Gross Earnings |  |  | Federal | \$48.01 |
|  |  |  |  |  | Provincial | \$21.64 |
| Regular | \$575.00/wk | \$575.00 |  |  | CPP | \$25.13 |
|  |  |  |  |  | El | \$9.95 |
|  |  |  |  |  | Total | \$104.73 |

a) What is Hank's gross weekly income?
b) What is his netincome?
c) What percent of his taxable income did he pay in federal taxes?

## PRACTISE YOUR NEW SKILLS

1. Juliana has an annual salary of $\$ 45,785.00$.
a) How much does she pay in union dues if the rate is $2.4 \%$ ?
b) How much does she pay in CPP if the rate is $4.95 \%$ and her taxable income is \$44686.16?
2. Mario had $\$ 685.74$ deducted in federal tax. If his taxable income was $\$ 2981.52$, what was his tax rate?
3. What will be your net pay if you have deductions of $\$ 105.30$ federal tax, $\$ 23.76$ provincial tax, $\$ 48.61 \mathrm{CPP}$, and $\$ 14.12 \mathrm{EI}$ from your paycheque of $\$ 982.00$ ?
