Section 7.2 – Practice Problems

1. If your annual salary is $125 000 and you get paid bi-weekly, what is your Gross Pay? What is it if you get paid semi-monthly?

\[
\text{Bi-Weekly: } 125 000 \div 26 = 4807.69 \\
\text{Semi-Monthly: } 125 000 \div 24 = 5208.33
\]

2. If you get a Gross Pay Paycheck twice a month of $3200, what is your annual salary?

\[3200 \times 24 = \$76 800\]

3. Complete the following chart.

<table>
<thead>
<tr>
<th>Annual Salary</th>
<th>Bi-Weekly Pay</th>
<th>Semi-Monthly Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>$62 400</td>
<td>$2400</td>
<td>$2600</td>
</tr>
<tr>
<td>$23 800</td>
<td>$915.38</td>
<td>$991.67</td>
</tr>
<tr>
<td>$68 400</td>
<td>$2630.77</td>
<td>$2850</td>
</tr>
<tr>
<td>$83 500</td>
<td>$3211.54</td>
<td>$3479.17</td>
</tr>
<tr>
<td>$59 080</td>
<td>$1958</td>
<td>$2121.17</td>
</tr>
<tr>
<td>$100 000</td>
<td>$3876.92</td>
<td>$4200</td>
</tr>
</tbody>
</table>
4. Adam sells cars and makes 2.5% commission. Last week he sold two cars, one was $63 000 and the other was $28 000. How much did he make?

\[
\begin{align*}
63000 & \quad 91000 \cdot 0.025 = \$2275 \\
28000 & \quad \underline{91000}
\end{align*}
\]

5. Jaewon sells clothes, he makes 3.5% on his first $300 and makes 4% on anything more. He also makes $12.50/hr. How much does he make in an 8 hour shift with sales of $1200?

\[
\begin{align*}
\text{Hourly:} \quad 8 \cdot 12.50 &= \$100 \\
\text{Commission:} \quad 300 \cdot 0.035 &= \$10.50 \\
900 \cdot 0.04 &= \$36.00 \\
\text{Total:} \quad \text{1200} - 300 &= \$900
\end{align*}
\]

\[
\begin{align*}
\text{Total:} \quad 100 + 10.50 + 36 &= \$146.50
\end{align*}
\]

6. Come up with your own question involving salary or commission and then solve it. Make it as challenging as possible.

**Answers will vary**

7. Harpinder works as a real estate agent, he makes 3% on the first $150 000 and 1.5% on the rest. He had a very successful month and sold three homes, they were $550 000, $890 000, and $1.2 million respectively. How much did he make that month?

\[
\begin{align*}
\text{550 000} & \quad 2,640,000 - 150,000 \\
\text{890 000} & \quad = 2,490,000 \\
\text{1 200 000} & \quad 150,000 \cdot 0.03 = \$4500 \\
\text{2,640 000 Total} & \quad 2,490,000 \cdot 0.015 = \$37,350 \\
\text{Total:} & \quad \text{Total:} \quad \$118,550
\end{align*}
\]
8. Complete the following table, show your work below.

<table>
<thead>
<tr>
<th>Selling Price</th>
<th>Commission Rate</th>
<th>Commission Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$630,000</td>
<td>4.75%</td>
<td>$29,925</td>
</tr>
<tr>
<td>$6200</td>
<td>6.25%</td>
<td>$387.50</td>
</tr>
<tr>
<td>$5456.52</td>
<td>2.3%</td>
<td>$125.50</td>
</tr>
</tbody>
</table>

\[
x(0.0475) = 29,925
\]

\[
x = \frac{29,925}{0.0475} = 630,000
\]

\[
6200x = 387.50
\]

\[
x = \frac{387.50}{6200} = 0.0625 \approx 6.25\%
\]

\[
x(0.023) = 125.50
\]

\[
x = \frac{125.50}{0.023} = \$5456.52
\]