

Section 1.2 – 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?

Semi-monthly is 24 times a year
 Bi-weekly is 26 times a year

$SM: \$5208.33$

$BW: \$4807.69$

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

$$3200 \cdot 2 = \$6400/\text{month}$$

$$\cancel{\$6400/\text{month}} \cdot \frac{12 \cancel{\text{month}}}{1 \text{ yr}} = \boxed{\$76800/\text{yr}}$$

3. Complete the following chart.

Times these by 26

Times these by 24

Divide by 24 or 26

Divide by 24 or 26

Annual Salary	Bi-Weekly Pay	Semi-Monthly Pay
\$62 400	\$2400	\$2600
\$23 800	\$915.38	\$991.76
\$68 400	\$2630.77	\$2850
\$83 500	\$3211.54	\$3479.17
\$50 908	\$1958	\$2121.17
\$100 800	\$3876.92	\$4200

$$2.5\% = 0.025$$

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?

$$63000 + 28000 = 91000$$

$$\$ 91000 \cdot 0.025 = \boxed{\$ 2275}$$

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?

Hourly wage: $8 \cdot 12.50 = \$100$

Commission: $300 \cdot 0.035 = \$10.50$
 $900 \cdot 0.04 = \$36$

Total
\$146.50

$$1200 = 300 + 900$$

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?

550 000	890 000	1 200 000
- 150 000	- 150 000	- 150 000
400 000	740 000	1 050 000
}		
2 190 000		

$$150000 \cdot 3 = 450000$$

$$450000 \cdot 0.03 = 13500$$

$$2190000 \cdot 0.015 = 32850$$

$$\boxed{\text{Total: } \$46350}$$

8. Complete the following table, show your work below.

Selling Price	Commission Rate	Commission Amount
\$ 630 000	4.75%	\$29 925
\$6200	6.25%	\$387.50
\$ 5456.52	2.3%	\$125.50

↓ Commission
 $\text{Price (\%)} = \text{Amount}$

$$i) \quad \frac{x \cancel{(0.0475)}}{0.0475} = \frac{29925}{0.0475} \Rightarrow x = \$630000$$

$$ii) \quad \frac{6200 \cancel{x}}{6200} = \frac{387.50}{6200} \Rightarrow x = 0.0625 = 6.25\%$$

$$iii) \quad \frac{x \cancel{(0.023)}}{0.023} = \frac{125.50}{0.023} \Rightarrow x = \$5456.52$$