

Calculating Earnings

Alternative Ways to Earn

- 1) Salary
- 2) Straight Commission
- 3) Salary & Commission

Salary

- a fixed earning based on a year, regardless of hours
- ex - \$60, 000/yr.
- could be paid out monthly, bimonthly or biweekly

ex How much is paid:

monthly - 12 pay periods,

$$\begin{aligned} & \$60,000 \div 12 \\ & = \$5000/\text{month} \end{aligned}$$

bimonthly - $2 \times 12 = 24$ pay periods

$$\begin{aligned} & \$60,000 \div 24 \\ & = \$2500 \text{ twice a month} \end{aligned}$$

biweekly - $52 \div 2 = 26$ pay periods

$$\begin{aligned} & \$60,000 \div 26 \\ & = \$2307.69 \text{ every two weeks} \end{aligned}$$

Straight Commission ^{.25} 25% 47% ^{.47} 8 1/2%
 ^{.29} 29% 4% ^{.04} ^{.085} 8.5%

$$\text{Pay} = \% \text{ Commission (as a decimal)} \times \$ \text{ Value of Item(s)}$$

Review: find
 7% of \$8500
^{.07}

$$.07 \times 8500 = \$595.00$$

^{2.5}
 2 1/2 % of \$347 000

$$.025 \times 347\,000 = \$8675.00$$

^{8.25}
 8 1/4 % of \$17 500 =

$$.0825 \times 17\,500 = \$1443.75$$

^{0.155}
 15.5% of \$1850 =

$$.155 \times 1850 = \$286.75$$

Practice questions

- 1) ^{0.05} 5% as a decimal, 2) ^{0.23} 23% as a decimal
- 3) ^{.16} 16% as a decimal, 4) ^{36.50 = 365} 36 1/2% as a decimal
- 5) 4% of \$1000 = ^{\$40.00} 40.00 6) ^{18% X} 18% of \$66,400 = ^{\$11952.00} 11952.00
- 7) ^{.21 X 845 = 177.45} 21% of \$845 = ^{\$177.45} 177.45
- 8) \$65,000 paid monthly $\div 12 = 5,416.67$
- 9) \$48,500 paid bi-monthly $\div 24 = 2,020.83$
- 10) \$57,000 paid bi-weekly $\div 26 = \$2,192.31$



Ex 1) Kelsey receives 8% commission on the sale value of every car she sells. Last week she sold 5 cars for a total of \$164,350 in sales.

How much money did she earn?

$$\begin{aligned} & \cdot 08 \times 164350 = \\ & \cdot \$ 13148.00 \end{aligned}$$

Ex 2 Tara receives 25% commission on each life insurance policy she sells. Last week she sold 5 policies: \$450, \$325, \$400, \$300, and \$500. What was her gross pay for the week?

$$\begin{array}{r} 450 \\ 325 \\ 400 \\ 300 \\ 500 \\ \hline 1975 \end{array}$$

$$1975 \times .25 = \\ \$493.75$$

Ex 3 Joel receives $5\frac{3}{4}\%$ ^{$= 75\% \cdot 75$} commissions on the value of all houses he sells. On Friday, Colin sold a house valued at \$275 000. How much money in commission did he earn?

$$\begin{aligned} & \cdot 05,75\% \\ & \cdot 0575 \end{aligned}$$

$$\begin{aligned} 275000 \times .0575 = \\ \$ 15812.50 \end{aligned}$$

Salary Plus Commission

$$\text{Gross Pay} = \text{Base Salary} + \text{Commission}$$

Ex 1) Jenna works for an insurance company that pays her a base salary of $\$350/\text{week}$ and $8\frac{1}{2}\%$ commission on her sales. If she sells $\$2150$ worth of insurance in a week, what is her pay?

$$\begin{array}{r} .085 \\ 182.75 \\ \hline 350.00 \\ \hline 532.75 \end{array}$$

$$2150 \times .085 = \$182.75$$

Ex. 2 Brendan works at Sears and makes \$450.00 a week plus 6% commission. If he sells \$1975.00 worth of furniture, how much does he earn?

$$\begin{array}{r}
 .06\% \\
 .06 \times 1975 = \$118.50 \\
 118.50 \\
 + 450.00 \\
 \hline
 \$568.50
 \end{array}$$

Commission $\frac{\%}{100} \times$ Sold Items
 CONVERT TO DECIMAL

$$\begin{array}{r}
 .085 \times 2150 = 182.75 \\
 \text{GROSS PAY} \\
 350.00 + 182.75 = \text{G.P.} \\
 = 532.75
 \end{array}$$

$$\begin{array}{r}
 \text{Commission } 0.06 \times 1975.00 \\
 = 118.50 \\
 \text{G.P.} \\
 450.00 + 118.50 = \\
 = 568.50
 \end{array}$$

$$\begin{array}{r}
 11,000 - 2,000 = 9,000 \\
 0.07 \times 9,000 \\
 = 630.00 \checkmark \\
 \text{G.P.} \\
 425.00 + 630.00 = \\
 1055.00 \checkmark
 \end{array}$$

Ex. 3 Ed gets paid a weekly salary of \$425.00 and a commission rate of 7% for any goods sold over \$2000.00. If he sold \$11,000 worth of goods, what did he earn last week?

$$\begin{array}{r} 11000 \\ - 2000 \\ \hline 9000 \end{array} \times .07 = \$630.00$$
$$\begin{array}{r} 630.00 \\ 425.00 \\ \hline \$1055.00 \end{array}$$

Calculating Gross Earnings

Calculate the gross earnings for Michael, who worked the schedule below. Rate of pay is \$10.45 Overtime is paid at time and a half.

a) Calculate gross pay based on weekly overtime.

b) Calculate gross pay based on daily 8 hr.

M - 12 T - 12 W - 6 Th - 6 F - 4