

Warm-up (Income Quiz Tues, Oct 29)

Natalie has been offered 2 jobs.

Job A pays \$1820 semi-monthly.

Job B pays \$1750 every 2 weeks.

a) what is the annual salary for each job?

Ⓐ $\$1820 \times (12 \times 2) = \$43,680$

Ⓑ $\$1750 \times \left(\frac{52}{2}\right) = \$45,500$

b) If each job has a 38 hour work week, what is the hourly pay for each job?

Ⓐ $\frac{\$43,680}{52} = \$840 \text{ per week} \Rightarrow \frac{\$840}{38} = \underline{\underline{\$22.11}}$

Ⓑ $\frac{\$45,500}{52} = \$875 \text{ per week} \Rightarrow \frac{\$875}{38} = \underline{\underline{\$23.03}}$

$\frac{\$1750}{2} =$

#4 WB
Pg 55

each day = $\frac{\$48,735}{190} = \256.50 per day

each hour = $\frac{\$256.50}{9.5} = \underline{\underline{\$27.00}}$

#1

per week
Pay Check

$\frac{\$36,288}{52} = \underline{\underline{\$697.85}}$ ← every year

$\frac{\$697.85}{37.5} = \underline{\underline{\$18.61}}$ per hour

17/18

time and a half

$10.5 \times \$18.20 \times 1.5$

Math 9 Section 2.1 – Income Part 2

Homework: Section 2.1 on Pg. 55; #1-4, 6, 9, 13, 14, 17, 18, 19, 22-24
Worksheet (at the back of package); #1-8

Commission: You get paid for how much you sell (percentage)

Commission = Sales \times Commission rate \leftarrow Decimal for formula

\uparrow
how much you sell

Example #1:

Frank earns 8% commission on furniture sales. If he sells \$3000 of furniture, how much commission does he earn?

$$\begin{aligned} \text{Commission} &= \text{sales} \times \text{rate} \\ &= \$3000 \times 8\% \leftarrow 0.08 \text{ (1) } \frac{8}{100} \text{ (2) } 0.08 \\ &= \$3000 \times 0.08 = \underline{\underline{\$240}} \end{aligned}$$

Sometimes, you earn different amounts of commission depending on how much you sell.

Example #2:

Sally receives commission based on how much wedding cake she sells. She gets 12% commission on all cake sales over \$600. If she sells \$2100 of cake in a certain week:

a) How much commission does she earn?

$$\begin{aligned} \text{Commission} &= \text{Sales} \times \text{rate} \\ &= (\$2100 - \$600) \times 12\% \leftarrow \frac{12}{100} \text{ (or) } 0.12 \\ &= \$1500 \times 0.12 = \underline{\underline{\$180}} \end{aligned}$$

b) Sally is paid \$22 per hour. If she works 35 hours during the same week, what is her gross income for the week?

$$\begin{aligned} \text{total} &= \text{wage} + \text{Commission} \\ &= \$22 \times 35 + \$180 \\ &= \$770 + \$180 = \underline{\underline{\$950}} \end{aligned}$$

Piece of Work: You get paid for each thing you make/do

Example #1: Supreme

Sam works in a ~~stussy~~ clothing factory. He gets \$10 for each T-shirt he sews. He can sew a T-shirt every 20 minutes.

a) How much does he make per hour?

$$\frac{60}{20} = 3 \text{ per hour} \Rightarrow \$10 \times 3 = \underline{\$30}$$

b) Sam gets paid every two weeks. If he works 38 hours per week, how much does he make each paycheque?

$$\text{per week } \$30 \times 38 = \$1140 \quad | \quad \text{2 weeks } \$1140 \times 2 = \underline{\$2280}$$

Example #2:

Cynthia works making custom skateboards. She earns 45% of the price for each skateboard made. It takes her 6.5 hours to make a \$575 skateboard.

a) How much does she earn per skateboard?

$$\$575 \times 0.45 = \underline{\$258.75}$$

b) How much does she earn per hour?

$$\frac{\$258.75}{6.5} = \underline{\$39.81}$$

c) If she works 39 hours every week, what is her gross income for the year?

$$\text{per week} : \$39.81 \times 39 = \$1552.59$$

$$\text{per year} : \$1552.59 \times 52 = \underline{\$80,734.68}$$

Now you should be able to complete all the homework on the worksheet and Section 2.1 on Pg. 55; #1-4, 6, 9, 13, 14, 17, 18, 19, 22-24

Quiz next Tues