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?

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

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

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

(A) $\dfrac{\$43,680}{52} = \$840 \underset{\text{per week}}{} \Rightarrow \dfrac{\$840}{38} = \underline{\$22.11}$

(B) $\dfrac{\$1750}{2} = \$875 \underset{\text{per week}}{} \Rightarrow \dfrac{\$875}{38} = \underline{\$23.03}$

Commission: <u>You get paid for how much you sell (percentage)</u>

Commission = <u>Sales</u> x <u>Commission rate</u> ←

what you sell

(Decimal for the formula)

Example #1:

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

$$\text{Commission} = \text{sales} \times \text{rate}$$

$$= \$3000 \times 8\% \leftarrow 0.08 \leftarrow \frac{8\%}{100} \text{ or } 0.08$$

$$= \$3000 \times 0.08 = \$240$$

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?

$$\text{Commission} = \text{Sales} \times \text{rate} \qquad \frac{12}{100} \text{ or } 0.12$$

$$= (\$2100 - \$600) \times 0.12 = \$180$$

no Commission

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

$$\text{total} = \text{wage} + \text{Commission}$$

$$= \$22 \times 35 + \$180$$

$$= \$950$$

Piece of Work: _You get paid for each thing you make/do_

Example #1: Supreme

Sam works in a ~~classy~~ 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?

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

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

each week : $30 × 38 = $1140 $\Rightarrow$ every 2 week $\Rightarrow$ $1140 × 2

= $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 × 0.45 = $258.75
↑
45%

b) How much does she earn per hour?

$$\frac{\$258.75}{6.5} = \$39.81 \text{ per hour}$$

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

$39.81 × 39 = $1552.59 → each week

$1552.59 × 52 = $80,734.68