## Learning Plan 6 <br> Chapter 6

## Question 2

Determine the earnings for the employee. Hours in excess of 40 are overtime (O.T.) hours.

| Name | S | M | T | W | Th | F | S | Reg. <br> Hrs. | O.T. <br> Hrs. | Reg. <br> Rate | O.T.Rate |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Burns, <br> J. | 8.5 | 8.4 | 8.5 | 8.5 | 8.8 | 8.3 |  |  |  | $\$ 8.82$ | $\$ 13.23$ |

What were Mr. Burns' earnings at the regular rate?
First find the total number of hours:
$8.5+8.4+8.5+8.5+8.8+8.3=51$ hours
Out of these 51 hours, 40 hours are regular and 11 hours are overtime.
The Regular Rate is $\$ 8.82$.
Multiply: $8.82 \cdot 40=\$ 352.80$
What were Mr. Burns' earnings at the overtime rate?
The Overtime Rate is $\$ 13.22$.
Multiply: $13.23 \cdot 11=\$ 145.53$

What were Mr. Burns' gross earnings?
Add: $\$ 352.80+\$ 145.53=\$ 498.33$

## Question 4

Some companies pay overtime for all time worked over 8 hours a day. Use this method to complete the following payroll ledger. Overtime is paid at the time-and-a-half rate.

|  | Hours worked |  |  |  |  |  | Total Hours | Reg. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Employee | S | M | T | W | Th | F | S | Reg. | O.T. | Rate |
| Rectra, J | - | 5.5 | 8 | 9 | 10.25 | 8 | - |  |  | $\$ 11.38$ |

## Solution

First split the hours into regular and overtime:

|  | M | T | W | Th | F |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Regular | 5.5 | 8 | 8 | 8 | 8 |
| Overtime |  |  | 1 | 2.25 |  |

Determine the number of regular hours that Mr. Rectra worked in the week.

$$
5.5+8+8+8+8=37.5 \text { hours }
$$

Determine the number of overtime hours that Mr. Rectra worked in the week.

$$
1+2.25=3.25 \text { hours }
$$

Whar was the overtime rate for Mr. Rectra?
Multiply the regular rate of $\$ 11.38$ by time-and-a-half.

$$
11.38 \cdot 1.5=\$ 17.07
$$

What was the amount of earnings at Mr. Rectra's regular pay?
Mr. Rectra worked 37.5 regular hours. The regular rate is $\$ 11.38$.

$$
\text { Multiply: } 37.5 \cdot 11.38=\$ 426.75
$$

What was the amount of earnings at Mr. Rectra's overtime pay?
Mr. Rectra worked 3.25 overtime hours. The overtime rate is $\$ 17.07$. Multiply: $3.25 \cdot 17.07=\$ 55.4775 \approx \$ 55.48$

What were the total gross wages for Mr. Rectra?

$$
426.75+55.48=\$ 482.23
$$

## Question 5

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Find the equivalent earnings for the salary indicated.

| Weekly | Biweekly | Semimonthly | Monthly | Annual |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  | $\$ 1956.24$ |  |

## Solution

What is the annual salary equivalent to a monthly salary of \$1956.24?

$$
\$ 1956.24 \cdot 12 \text { months }=\$ 23474.88
$$

What is the biweekly salary equivalent to a monthly salary of \$1956.24?
There are 52 weeks in one year.
$52 \div 2=26$ biweekly payments in one year.
$\$ 1956.24 \cdot 12$ months $=\$ 23474.88$

$$
\$ 23474.88 \div 26=\$ 902.88
$$

What is the semimonthly salary equivalent to a monthly salary of \$1956.24?

$$
\$ 1956.24 \div 2=\$ 978.12
$$

What is the weekly salary equivalent to a monthly salary of \$1956.24?

$$
\begin{gathered}
\$ 1956.24 \cdot 12 \text { months }=\$ 23474.88 \\
\$ 23474.88 \div 52 \text { weeks }=\$ 451.44
\end{gathered}
$$

## Question 6

Find the gross earnings for Phil Justin, a phone pollster for Accurate Info. The company pays phone pollsters 14 cents for each telephone call that results in data. During one period, Phil made 1585 calls, 1420 of which resulted in data.
What are Phil's gross earnings for the period in which he made 1585 calls, 1420 of which resulted in data?

## Solution

$$
1420 \cdot 0.14=\$ 198.80
$$

## Question 7

Beth Garvin, a food-supplements representative, had sales of $\$ 5991$ with allowances of $\$ 454$. If her commission rate is $8 \%$ find her gross earnings. What were Beth's gross earnings?

Solution

$$
\begin{aligned}
& \$ 5991-\$ 454=\$ 5537 \\
& 0.08 \cdot \$ 5537=\$ 442.96
\end{aligned}
$$

## Question 8

8. 217 Tutorial software tester Ellie Sharkey is paid by the day either on a piecework basis or at an hourly
rate of an 8-hour day, whichever is greater. She is paid $\$ 1.80$ per problem tested or $\$ 9.50$ per
hour. Ellie's production for a week is shown below.

| Employee | Production (problems tested) |  |  |  |  |  | Hourly |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rate | Gross Earnings |  |  |  |  |  |  |
|  | M | T | W | Th | F |  |  |
| Starkey, E. | 68 | 63 | 65 | 62 | 62 | $\$ 9.50$ |  |
| Daily wages |  |  |  |  |  | xxxxxx |  |

What are Ms. Starkey's gross earnings?
$\$ 576.00$ (Type an integer or a decimal. Round to the nearest cent as needed.)


## Question 9

> 9. Jun Lynn sells college textbooks on commission. She gets $8 \%$ on the first $\$ 6000$ of sales, $16 \%$ on the next $\$ 6000$ of sales, and $20 \%$ on sales over $\$ 12,000$. In July of 1997 ven's sales total was $\$ 17,000$.
> What was Jun's gross commission for July 1997?
> $\$ 2440^{\top}$

$$
\begin{gathered}
\$ 17,000 \\
\$ 6000 \\
8 \% \\
0.08 \cdot 6000+0 \\
16 \%
\end{gathered}
$$

| Question 10 |  |
| :---: | :---: |
| 10 | Natalie Brody is a trainee insurance salesperson. She is paid a base salary of $\$ 450$ a week, a commission of $0.6 \%$ on sales above $\$ 15,000$ up to $\$ 25,000$, and a commission of $1.4 \%$ on sales in excess of $\$ 25,000$. Natalie had sales of $\$ 24,750$ in the week of $5 / 12$. |
|  | What were Natalie's gross earnings for the week of 5/12? |
|  | \$508.50 (Type an integer or a decimal. Round to the nearest cent as needed.) |
|  | $24,750-15,000=9750$ |
|  | $450+0.006 .9750=508,50$ |

