


 LESSON
1.5

Salary

Vocab:

Salary -

the amount of money you make on a reg. basis.

Weekly -

52 times a year.

Biweekly -

26 times a year.

Semimonthly -

24 times a year.

Monthly -

12 times a year.

$$\text{Salary per Pay Period} = \frac{\text{Annual Salary}}{\text{Number of Pay Periods per Year}}$$

**LESSON
1.5****EXAMPLE 1**

Tom Costello is a Web site designer. His annual salary is \$67,400.
What is Tom's monthly salary? What is his weekly salary?

$$\frac{67400}{12} = \$5616.67$$

$$\frac{67400}{52} = \$1296.15$$

**LESSON
1.5**

Complete the problems. Check your answers in the back of the book.

1. Sam Gerber earns \$42,900 per year. Find his biweekly salary.

$$\frac{42900}{26} = \$1650$$

2. Brenda Ortiz earns \$18,200 per year. Find her semimonthly salary.

$$\frac{18200}{24} = \$758.33$$

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EXAMPLE 2 Algebra

Your current job as a wedding planner pays a monthly gross salary of \$2,560. You are offered a new position as an event planner at a children's museum that pays \$12.60 per hour with time and a half per hour for all hours over 40 per week. How many hours of overtime per week would you need to work to earn the same amount as your current job?

$$\frac{12(2560)}{52} = \$590.77$$

$$12.60(40) + 1.5(12.60)(x) = 590.77$$

$$\begin{array}{r} 504 \\ -504 \\ \hline 18.90x = 86.77 \end{array}$$

$$\begin{array}{r} 18.90x = 86.77 \\ \hline 18.90 \quad \hline 18.90 \end{array}$$

$$x = 4.59h$$

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Complete the problem. Check your answer in the back of the book.

3. Mark Adler earned \$1,650 per month as an assistant technician at a recording studio. His new job pays \$9.80 per hour with time and a half for all hours over 36 per week. How many hours of overtime per week will he need to work to earn the same amount per week as his current job?

$$\frac{12(1650)}{52} = 380.77$$

$$9.80(36) + 1.5(9.80)(x) = 380.77$$

$$352.80 + 14.70x = 380.77$$

$$\begin{array}{r} 352.80 + 14.70x = 380.77 \\ - 352.80 \\ \hline 14.70x = 27.97 \\ \frac{14.70x}{14.70} = \frac{27.97}{14.70} \end{array}$$

$$x = 1.9 \text{ hrs}$$

A graphic with a blue and red gradient background. The word "LESSON" is written in white capital letters at the top, and the number "1.6" is written in white below it.

Commission

Vocab:

Commission - when you earn a % of what you sale.

Commission Rate - % you earn on a sale

Straight Commission - earn just a commission

**LESSON
1.6****EXAMPLE 1**

Bob Morales sells commercial real estate at a $7\frac{1}{2}\%$ straight commission. Last week his sales totaled \$290,000. What was his commission?

$$7\frac{1}{2}\%$$
$$0.075$$
$$0.075(290000) = \boxed{\$21,750}$$

**LESSON
1.6**

Find the straight commission. Check your answers in the back of the book.

1. \$9,400 × 8% commission rate

$$0.08(9400) = \boxed{\$752}$$

2. \$143,400 × 5.5% commission rate

$$0.055(143400) = \boxed{\$7887}$$

LESSON
1.6**EXAMPLE 2** Algebra

Marcia Stein sells ergonomic chairs at The Office Center. She is guaranteed a minimum salary of \$1,850 per month plus commission of 6.25% of her total sales. What are Marcia's total sales for a month in which her gross pay was \$3,890?

$$\begin{array}{r} \cancel{1850} + 0.0625(x) = 3890 \\ \hline \cancel{-1850} \qquad \qquad \qquad \underline{-1850} \end{array}$$
$$\begin{array}{r} \cancel{0.0625}x = 2040 \\ \hline \cancel{0.0625} \qquad \underline{0.0625} \end{array}$$
$$x = 32,640$$

**LESSON
1.6**

Complete the problems. Check your answers in the back of the book.

3. Isaiah Copeland sells tennis equipment. He is guaranteed a minimum salary of \$1,500 per month plus 5.75% of his total sales. What are Isaiah's total sales for a month in which his gross pay was \$2,075?

$$\begin{array}{r} 1500 + 0.0575(x) = 2075 \\ -1500 \quad \quad \quad -1500 \\ \hline \end{array}$$

$$\begin{array}{r} 0.0575x = 575 \\ \hline 0.0575 \quad 0.0575 \end{array}$$

$$x = \$10,000$$

LESSON
1.6

Complete the problems. Check your answers in the back of the book.

4. Harold Pope is a ticket broker. He is guaranteed a minimum weekly salary of \$650 or 5% of his total sales, whichever is higher. What are his total sales for a week in which his gross pay was \$725?

Since \$725 > 650
use 5%

$$\frac{0.05(x)}{0.05} = \frac{725}{0.05}$$

$$x = \$14,500$$

**LESSON
1.6**

Find the commission.

| | Sales Position | Total Sales | × | Straight Commission Rate | = | Commission |
|----|----------------|-------------|---|--------------------------|---|------------|
| 5. | Real estate | \$198,000 | × | 8% | = | |

$$(198000)(0.08) = \$15,840$$