

1.1 – Straight-Time Pay

- The formula for calculating straight-time pay is:
 - Straight-Time Pay = Hourly Rate x Hours Worked

Find the straight-time pay for each situation.

- 1) Shawna Nguyen is a mail clerk at an advertising firm. She earns \$12.00 per hour. This week she worked 39½ hours. What is her straight-time pay for the week?

$$= 12(39.5) = \$474.00$$

- 2) \$7.60 per hour x 40 hours = \$304.00

- 3) \$7.90 per hour x 37 hours = \$292.30

- 4) Ralph Masales is an accounting clerk. He earns \$14.40 per hour. How many hours per week must he work if he wants to earn approximately \$550.00 per week?

$$\frac{550}{14.40} = \frac{14.40x}{14.40} \quad x = 38.2 \text{ hours}$$

- 5) Bobby Hsu is an office manager at a weekly newspaper. He earns \$22.50 per hour. How many hours per week does Bobby work if he earns \$522.00 per week?

$$522 = 22.50x$$

$$x = 23.2 \text{ hrs}$$

- 6) Lauren Rodriguez earns \$8.35 per hour as a swimming instructor. How many hours per week must she work if she wants to earn approximately \$190.00 per week?

$$190 = 8.35x$$

$$x = 22.8 \text{ hrs}$$

1.2 – Overtime Pay

- The formula for calculating overtime pay is:
 - Overtime Pay = Overtime Rate x Overtime Hours Worked
 - Total Pay = Straight-Time Pay + Overtime Pay

Find the total pay for each situation.

- 1) Alan Moore is paid \$8.20 an hour for a regular 40-hour week as a restaurant host. His overtime rate is 1½ times his regular hourly rate. This week he worked his regular 40 hours plus 10 hour of overtime. What is his total pay?

$$\begin{array}{l}
 \textcircled{1} \quad 8.20(40) = \$328.00 \\
 \textcircled{2} \quad 1.5(8.20)(10) = \$123.00 \\
 \quad \downarrow \quad \downarrow \quad \downarrow \\
 \text{overtime} \quad \text{hr} \quad \text{hrs} \\
 \text{rate} \quad \text{rate} \quad \\
 \end{array}
 \begin{array}{l}
 \text{add} \\
 \text{Total Pay} \\
 \boxed{\$451.00}
 \end{array}$$

- 2) Josie Perez makes \$9.00 an hour. She worked 40 regular hours and 6 hours at time and a half.

$$\begin{array}{l}
 \textcircled{1} \quad 9.00(40) = \$360.00 \\
 \textcircled{2} \quad 1.5(9.00)(6) = \$81.00 \\
 \textcircled{3} \quad \$360.00 + \$81.00 = \boxed{\$441.00}
 \end{array}
 \begin{array}{l}
 \text{add to} \\
 \text{get Total} \\
 \text{Pay}
 \end{array}$$

- 3) Ed Lange makes \$11.50 an hour. This week he worked 36 hours and 7 hours at time and a half.

$$\begin{array}{l}
 \textcircled{1} \quad 11.50(36) = \$414.00 \\
 \textcircled{2} \quad 1.5(11.50)(7) = \$120.75 \\
 \textcircled{3} \quad \$414.00 + \$120.75 = \boxed{\$534.75}
 \end{array}
 \begin{array}{l}
 \text{add}
 \end{array}$$

Find the amount of overtime worked for each situation.

- 4) Jessica is a receptionist at a hotel and conference center. She is paid \$12.50 an hour for a regular 40-hour week. Her overtime pay is 1½ times her regular hourly rate. This past week Jessica earned \$612.50 in total pay. How many hours of overtime did she work?

$$\text{Total Pay} = \text{Straight time Pay} + \text{Overtime Pay}$$

$$612.50 = [12.50(40)] + [1.5(12.50)x]$$

$$612.50 = 500 + 18.75x$$

$$-500 \quad -500$$

$$112.50 = 18.75x$$

$$18.75 \quad 18.75$$

$$\boxed{x = 6 \text{ hrs}}$$

Chapter 1 – Gross Income NOTES

- 5) Corey earns \$11.80 an hour for a regular 40-hour week at the pet store. His overtime pay is 1½ times his regular hourly rate. Last week Corey earned \$613.60 in total pay. How many hours of overtime did he work?

$$613.60 = [11.80(40)] + [1.5(11.80)x]$$

$$\begin{array}{r} 613.60 = 472 + 17.70x \\ - 472 \quad - 472 \\ \hline 141.60 = 17.70x \\ 17.70 \quad 17.70 \end{array}$$

$x = 8$ hrs
overtime

- 6) Western Deli pays its couriers straight time for 36 hours per week and double time for any hours more than 36 worked. Last week Kevin worked a total of 42 hours and had total pay of \$545.28. What is his straight-time pay?

$$545.28 = 36x + 2(6)(x)$$

$$545.28 = 36x + 12x$$

$$\begin{array}{r} 545.28 = 48x \\ 48 \quad 48 \end{array}$$

$$x = \$11.36 \text{ per hr}$$

Straight Time Pay

$$= \$11.36(36)$$

$$= \$408.96$$

1.3 – Weekly Time Card

- To compute the number of hours worked in a week:
 - Total Hours = Sum of Daily Hours

Find the total number of hours for each person.

- 1) Reggie Blanco worked from 8:00 AM to 10:45 AM and from 12:15 PM to 4:15 PM.

$$2 \text{ hrs } 45 \text{ mins} + 4 \text{ hrs}$$

$$6 \text{ hrs } 45 \text{ mins}$$

- 2) Ruth worked from 7:30 AM to 11:55 AM and from 1:00 PM to 4:50 PM.

$$4 \text{ hrs } 25 \text{ mins} + 3 \text{ hrs } 50 \text{ mins}$$

$$8 \text{ hrs } 15 \text{ mins}$$

1.4 - Piecework

- To calculate this, use this formula:
 - Total Pay = Rate per Item x Number of Items Purchased

Find the total pay.

- 1) \$3.20 per item, 140 items produced

$$3.20(140) = \$448.00$$

Complete the problems.

- 2) The Sunscreen Company, LLC, sells and installs window film for automobiles. Sara manages one Sunscreen shop. She reports that during the past week, her shop applied window film to 19 autos. It charges \$179.99 for a four-door sedan and \$149.99 for a two-door coupe. Sara reports that \$3,209.81 in total receipts had been collected. In that week, how many

a. Four-door sedans and b. Two-door coupes had been serviced?

$x = 4 \text{ door}$
 $19 - x = 2 \text{ door}$
 $19 - 12 = 7$

$$179.99x + 149.99(19 - x) = 3209.81$$

$$179.99x + 2849.81 - 149.99x = 3209.81$$

$$30x + 2849.81 = 3209.81$$

$$\begin{array}{r} 30x + 2849.81 = 3209.81 \\ -2849.81 \quad -2849.81 \\ \hline 30x = 360 \\ 30 \quad 30 \\ \hline x = 12 \end{array}$$

$x = 12$ → 4 door sedan

- 3) Copy Center charges 8 cents a page for machine-fed copies and 20 cents per page for hand-fed copies. If Logan's bill for 80 copies of his movie script is \$13.00, how many copies of each type were made?

$x = \text{machine}$
 $y = \text{hand fed}$
 $80 - 55 = 25$
 $x = 25$

$$0.08x + 0.2y = 13$$

$$x + y = 80$$

$$\begin{array}{r} x + y = 80 \\ -y \quad -y \\ \hline x = 80 - y \end{array}$$

$$0.08(80 - y) + 0.2y = 13$$

$$6.4 - 0.08y + 0.2y = 13$$

$$6.4 + 0.12y = 13$$

$$\begin{array}{r} 6.4 + 0.12y = 13 \\ -6.4 \quad -6.4 \\ \hline 0.12y = 6.6 \\ 0.12 \quad 0.12 \\ \hline y = 55 \end{array}$$

- 4) Mary owns a carpet cleaning business. She charges \$67.95 for a two-bedroom house and \$82.25 for a three-bedroom house. Last month the company had gross receipts of \$4,413.00 for cleaning carpet in 8 more three-bedroom houses than two-bedroom houses. How many of each type did the company clean?

pg. 98-99
 # 5-14 ALL, 16-24 EVEN
 pg. 101-102
 # 6-10 EVEN, 12-16 EVEN

1.5 – Salary

- Different types of pay periods per year:
 - 52 weekly, 26 biweekly, 24 semimonthly, 12 monthly
 - $\text{Salary per Pay Period} = \frac{\text{Annual Salary}}{\text{Number of Pay Periods per Year}}$

Complete the problems.

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

$$\text{monthly: } \frac{67,400}{12}$$

$$\text{monthly} = \$5,616.67$$

$$\text{Weekly: } \frac{67400}{52}$$

$$= \$1296.15$$

- 2) Sam earns \$42,900 per year. Find his biweekly salary.

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

$$X = \$1650.00$$

- 3) Brenda earns \$18,200 per year. Find her semimonthly salary.

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

$$X = \$758.33$$

- 4) 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 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?

Hourly Wage + Overtime Pay = Total

$$12.60(40) + 1.5(12.60)x = \left[\frac{2560 \times 12}{52} \right]$$

$$\begin{array}{r} 504 + 18.90x = 590.77 \\ -504 \quad \quad -504 \\ \hline 18.90x = 86.77 \end{array}$$

$$X = 4.6 \text{ hrs overtime}$$

Chapter 1 – Gross Income NOTES

- 5) Mark 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?

$$9.80(36) + 1.5(9.80)x = \left[\frac{1650 \times 12}{52} \right]$$

$$352.80 + 14.70x = 380.77$$
$$14.70x = 27.97$$

$x = 2 \text{ hrs}$
overtime

1.6 – Commission

- Formula for calculating straight commission is:
 - Straight Commission = Total Sales x Commission Rate

Find the straight commission.

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

$$= 290,000(0.075)$$
$$= \$21,750$$

- 2) \$9,400 x 8% commission rate

$$= \$752.00$$

Complete the problems.

- 3) Marcia 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 \$3,980?

Total = Minimum Salary + Commission

$$\begin{array}{r} 3980 = 1850 + 0.0625x \\ -1850 \quad -1850 \\ \hline 2130 = 0.0625x \end{array}$$

$$x = \$34,080$$

- 4) Harold 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?

$$\begin{array}{r} 725 = 0.05x \\ 0.05 \quad 0.05 \\ \hline \end{array}$$

$$x = \$14,500$$

1.7 – Graduated Commission

- The general formula is:
 - Total Graduated Commission = Sum of Commissions for All Levels of Sales

Complete the problems.

$$9840 - 1000 = 8840 - 2000 = 6840$$

- 1) Irene sells appliances at Twin City Sales. She receives a graduated commission as shown. Irene's sales for the past month totaled \$9,840. What was her commission for the month?

Commission Percent	Level of Sales
4 %	First \$1,000
6 %	Next \$2,000
8 %	Over \$3,000

$$1000(0.04) = 40$$

$$2000(0.06) = 120$$

$$6840(0.08) = 547.20$$

$$\boxed{\$ 707.20}$$

- 2) Sal makes 10% commission on the first \$5,000 of sales and 15% on any sales over \$5,000. Find his total graduated commission on \$15,000 in sales.

- 3) Jackson makes a 5% commission on the first \$2,000 of sales she makes and 8% on any sales over \$2,000. Find her total graduated commission on \$7,740 in sales.

$$2000(0.05) = 100$$

$$5740(0.08) = 459.20$$

$$\boxed{\$ 559.20}$$

Chapter 1 – Gross Income NOTES

- 4) Mike is paid weekly and earns a 4% straight commission on sales of \$5,000 or less and 5% on sales in excess of \$5,000. One week Mike's total graduated commission was \$362. What were his total sales for that week?

$$\text{Total Graduated Commission} = \text{Commission 1st } 5000 + \text{Commission over } 5000$$

$$362 = 0.04(5000) + 0.05(x - 5000)$$

$$362 = \underline{200} + 0.05x - \underline{250}$$

- 5) Sarah is paid a weekly commission of 3.5% on sales of \$7,500 or less and 5.5% on sales in excess of \$7,500. Last week Sarah's commission was \$822.40. What was the total of her sales for the week?

$$\begin{array}{r} 362 = 0.05x - 50 \\ +50 \qquad \qquad +50 \\ \hline \end{array}$$

$$\begin{array}{r} 412 = 0.05x \\ \hline 0.05 \quad 0.05 \end{array}$$

$$x = \$8240.00$$