

Time Units:

1 year ≈ 52 weeks

1 year = 12 months

1 year = 365 days

1. Sally makes an gross annual salary of \$47,000. If Sally is paid weekly, what should the gross amount of her weekly paycheck?

$$\frac{47000}{52} = \frac{47000 \div 52}{903.8461538}$$

$$\frac{\$47000}{\cancel{\text{YEAR}} \mid \cancel{1 \text{ YEAR}}} \mid \frac{\cancel{52 \text{ WEEK}}}{\text{YEAR}} = \$903.85$$

2. Justin earns \$2140 each month at his job. What is ~~the~~ amount of his annual salary?

$$2140 * 12 = 2140 * 12 = 25680$$

$$\frac{\$2140}{\cancel{\text{MONTH}} \mid \cancel{12 \text{ MONTH}}} \mid \frac{\cancel{1 \text{ year}}}{\text{YEAR}} = \$25680$$

3. Scott works as a college professor at a community college. He is paid \$950 for each credit hour of classes he teaches. If he teaches a total of 51 credit hours how much can he expect to make annually?

$$950 * 51 = 950 * 51 = 48450$$

$$\frac{\$950}{\cancel{\text{CR HOUR}} \mid \cancel{51 \text{ CR HOURS}}} \mid \frac{\cancel{1 \text{ YEAR}}}{\text{YEAR}} = \$48,450$$

Scott was told he should expect to work a total of 205 days of the year and work 8 hours each day. If this is accurate, what is Scott's effective hourly rate of pay?

$$\frac{\$48450}{1640} = \frac{48450 \div 1640}{29.54268293}$$

$$\frac{\$48450}{\cancel{\text{YEAR}} \mid \cancel{1 \text{ YEAR}} \mid \cancel{1 \text{ DAY}}} \mid \frac{\cancel{205 \text{ DAYS}} \mid \cancel{8 \text{ HRS}}}{\text{YEAR}} \approx \$29.54/\text{HR}$$

(48450 * 1 * 1) / (1 * 205 * 8)
29.54268293

TOTAL HOURS = 205 * 8 = 1640 Hours

4. David started a job at as a mechanic and is being paid \$13.20 an hour. The company suggested that he would be working 254 days and 8 hours each day. What should be David's gross annual salary?

$$(\$13.20 * 8) * 254 = 13.20 * 8 * 254 = 26822.4$$

$$\frac{\$13.20}{\cancel{1 \text{ HR}} \mid \cancel{1 \text{ DAY}}} \mid \frac{\cancel{254 \text{ DAY}}}{\cancel{1 \text{ YR}}} = \$26,822.40$$

5. Tim just took a job working for a software company. His contract states he will receive an annual salary of \$61,500 and be paid monthly. Each month he will have the following deduction made from his paycheck:

$$61500 \div 12 = \$5125.00$$

- Social Security at a rate of 6.2% → $5125 * .062 = \$317.75$
- Medicare at a rate of 1.5% → $5125 * .015 = \$76.88$
- State Taxes at a rate of 3% → $5125 * .03 = \$153.75$
- Federal Taxes at rate of 11% → $5125 * .11 = \$563.75$
- Insurance premiums in the amount of \$290 → $= \$290$

How much can Tim actually expect to receive on his net paycheck each month?

$$= 5125 - 317.75 - 76.88 - 153.75 - 563.75 - 290$$

$$= \$3722.87 \text{ PER MONTH}$$

5125 - 317.75 - 76.88 - 153.75 - 563.75 - 290
3722.87

Katie is considering 3 job offers in education publishing. Here are the following 3 offers placed before Katie:

A. She can work at McCray-Hall educational publishing as an editor with a salary of \$46,500 per year. In addition to the regular federal holidays the company permits 10 days of selected leave (sick or vacation). The contract assumes the employee will actually work a minimum of 240 days per year (any less and salary will be deducted). Each day will consist of 8 working hours. The 8 working hours does not include time for lunch.

B. She can work at e-Learning designing online curriculum. At e-Learning, she will be paid an hourly wage of \$26.00 per hour. The company expects the employee to work 5 days a week from 9:00am to 6:00pm with an hour off for lunch which they must clock out for. The office will be closed on all federal holidays for which they will not be paid because they are not working. (There are usually 10 recognized federal holidays of which 1 usually falls on a weekend)

$$9 - 12 \quad 1 - 6 \quad = 8 \text{ HOUR DAY}$$

$$3 \text{ HR} + 5 \text{ HRS}$$

$$52 * 5$$

$$260$$

$$\text{Ans} - 9$$

$$251$$

$$(52 \text{ WEEKS} * 5 \text{ DAYS}) - 9 = 251 \text{ DAYS}$$

$$\text{HOLIDAYS}$$

C. The third offer is to sell textbooks for Allison-Weddly Publishing. Allison-Weddly offers to pay \$10 per hour, a 2.8% commission on all sales, and all business related travel expenses including a company car to drive. With this job she will be able to set her own hours so that they meet the needs of her customers. Based on previous employees in the area she will support, the average textbook sales per month is from \$60,000 to \$100,000 (depending on her ability), and the average sales person logs 2300 hours of work per year.

$$\text{COMMISSION: } (60000 * 12 * .028) = \$20,160 \text{ PER YEAR}$$

$$\text{HOURLY PAY: } (2300 * 10) = \$23,000 \text{ PER YEAR}$$

$$\underline{\$43,160}$$

1. Estimate the gross annual income for each job offer, the total number of hours worked for the year, and the effective hourly rate.

	Editor (McCray-Hall)	Designer (e-Learning)	Salesperson (Allison-Weddly)
Gross Annual Income	\$46,500	$2008 * 26 = \$52,208$	\$43,160
Annual Hours Worked	$240 * 8 = 1920 \text{ HR}$	$251 * 8 = 2008 \text{ HR}$	2300 Hours
Effective Hourly Rate	$\frac{46500}{1920} \approx \$24.22 / \text{HR}$	$= \$26.00 / \text{HR}$	$\frac{43160}{2300} = \$18.77 / \text{HR}$

A. At McCray-Hall educational publishing she will be provided with free life insurance for \$25,000 of coverage. Her health & dental or medical premiums are \$40/month. Finally, the company would require her to automatically invest 2% of her gross monthly income for retirement.

GROSS ANNUAL = \$46500

B. At e-Learning she will have to pay \$5 per month for a life insurance policy of \$25,000. Her health & dental or medical premiums are \$50 per month. Finally, the company would provide her with a free retirement plan.

GROSS ANNUAL = \$52208

C. Allison-Weddly will not provide any life insurance policies. Her health & dental or medical premiums are \$90/month. Finally, the company would require her to automatically invest \$200 per month for retirement

CONSERVATIVE GROSS ANNUAL = \$43160

2. Fill out the table below by first estimating her gross monthly income with each company. Determine the Social Security she would need to pay if it would require that she pay 6.2% of her gross income. Similarly, find the cost of Medicare at 1.2%, State Income Taxes at 5%, and Federal Income Tax at 14%. Next, using the information above determine how much she would pay for life insurance, medical insurance premiums, retirement costs. Finally, determine her net monthly paycheck.

	$\begin{array}{r} 3875-240.25-46.5 \\ 0-193.75-542.50 \\ 0-40-77.50 \\ \hline 2734.5 \end{array}$	$\begin{array}{r} 4350.67-269.74-5 \\ 2.21-217.53-609. \\ 09-5-50-0 \\ \hline 3147.1 \end{array}$	$\begin{array}{r} 3596.67-222.99-4 \\ 3.16-179.83-503. \\ 53-0-90-200 \\ \hline 2357.16 \end{array}$
GROSS Monthly Income	$\$46500 \div 12 = \3875	$\$52208 \div 12 = \4350.67	$\$43160 \div 12 = \3596.67
Social Security (6.2%)	$3875(.062) = \$240.25$	$4350.67(.062) = \$269.74$	$3596.67(.062) = \$222.99$
Medicare (1.2%)	$3875(.012) = \$46.50$	$4350.67(.012) = \$52.21$	$3596.67(.012) = \$43.16$
State Income Tax (5%)	$3875(.05) = \$193.75$	$4350.67(.05) = \$217.53$	$3596.67(.05) = \$179.83$
Federal Income Tax (14%)	$3875(.14) = \$542.50$	$4350.67(.14) = \$609.09$	$3596.67(.14) = \$503.53$
Life Insurance	(FREE) $\$0$ <small>(\$25,000)</small>	(25,000) $\$5$	(None) $\$0$
Medical Insurance Premium	$\$40$	$\$50$	$\$90$
Retirement Costs	$3875(.02) = \$77.50$	(FREE) $\$0$	$\$200$
NET Monthly Income	$\$2734.50$	$\$3147.10$	$\$2357.16$

3. Which job would you recommend that Katie take or which job would you take? Explain your reasoning.

IT IS REALLY YOUR DECISION AND WOULD PROBABLY BE BASED ON YOUR NEEDS & PERSONALITY.