**Decision Making in Finance: Future Value of an Investment**

VI.A Student Activity Sheet 1: You Have to Get Money to Make Money

**1.** Kafi is considering three job offers in educational publishing.

* One is a full-time position as an editor that pays a salary of $37,500 per year.
* Another is a full-time position as an e-Learning designer that pays an hourly wage of $26.50. The job assumes five 8-hour days per week.
* The final offer is for a sales representative that pays a 5% commission. Sales representatives typically sell an average of $100,000 per month in textbooks.

Record the income information for the editor, designer, and sales representative in Row 1 of Job Summary Table 1 at the end of this activity sheet.

**2.** Estimate the gross *annual* income for each job offer. Record your estimate in Row 3 of Job Summary Table 1. Use Row 2 for any calculations that are needed to determine the income.

**3.** Estimate the gross *monthly* income for each job offer. For the purposes of his comparison, Kafi assumes that each job pays monthly. Record your estimate in Row 5 of Job Summary Table 1. Use Row 4 for any calculations that are needed to determine the income.

**4.** Based on the gross monthly income, which job do you recommend Kafi take? Why?

**5.** Determine the after-tax income for each job offer. Use the following information:

The U.S. government deducts Social Security (6.2%) and Medicare (1.45%).

Kafi will deduct 15% of gross income to cover federal income tax.

Kafi does not live in a state with state income tax.

Record your estimate in Row 7 of Job Summary Table 1. Use Row 6 for any calculations that are needed to determine the income.

**6.** Kafi determines that he needs at least $3,000 per month in after-tax income to cover his monthly expenses. Based on this budget estimate, are there any jobs that Kafi should not take? Why?

Another consideration in comparing jobs is the benefits each provides, such as health insurance, retirement plan, vacation time, and sick leave.

The editor position includes two weeks of paid vacation and five paid sick days per year, paid health insurance, life insurance costing $35 per month, and a fully paid retirement plan.

The designer position includes five paid vacation days and three paid sick days per year, paid health insurance, life insurance costing $35 per month, and a retirement plan that costs 3% of after-tax income.

The sales position has no paid vacation or sick days, paid health insurance, paid life insurance, and a retirement plan costing $400 per month.

**7.** Estimate the *monthly cost* that will be deducted from Kafi’s pay for benefits. Use the following information:

Kafi plans on taking two weeks (10 days) for vacation per year.

In the past, Kafi averaged three sick days per year.

Kafi plans to purchase life insurance and save for his retirement.

Record your estimate in Job Summary Table 1 in Rows 8 through 12.

**8.** Estimate the monthly take-home income in Row 13 of Job Summary Table 1.

**9.** Based on the completed Job Summary Table 1, which job do you recommend that Kafi take? Explain your recommendation based on the net income.

**10.** Are there any factors that could affect the accuracy of the estimated net incomes?

If *yes*, does this change your recommendation? Explain your reasoning.

**11.** Are there any other factors that Kafi should consider when deciding which job to take?

If *yes*, does this change your recommendation? Explain your reasoning.

**12. EXTENSION:** You are considering two job offers: a full-time permanent position that pays $55,500 annually and a full-time contract job that pays $29 per hour. Estimate the gross annual income, gross monthly income, and the after-tax monthly income for each job offer. Record your estimates in Job Summary Table 2 at the end of this activity sheet. Use the information for calculating income, taxes, and costs that Kafi used. The contract job is self-employment, which is taxed an additional 7.65% of gross income.

Based on the gross monthly income, which job should you take? Why?

Based on the after-tax income, which job should you take? Why?

**13. EXTENSION:** The permanent position will cost you $95 per month in health care benefits and 4% of your after-tax income in retirement contributions. The contract job will cost you $150 per month in health care benefits and 8% of your after-tax income in retirement contributions. Estimate the take-home income for each job offer and record it in Job Summary Table 2.

Based on this information, which job should you take? Why?

**14. REFLECTION:** Did your decision on which job to take change throughout the analysis?

What does that say about the decision process for considering any job offer?

When considering various job offers, what will factor into your decision?

**Job Summary Table 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Row**  **No.** | Job | **Editor** | **Designer** | **Sales Representative** |
| 1 | Income information |  |  |  |
| 2 | Process |  |  |  |
| 3 | Gross annual income |  |  |  |
| 4 | Process |  |  |  |
| 5 | Gross Monthly Income |  |  |  |
| 6 | Process |  |  |  |
| 7 | After Tax Monthly Income |  |  |  |
| 8 | Process:  Vacation |  |  |  |
| 9 | Process:  Sick Leave |  |  |  |
| 10 | Process:  Health Insurance |  |  |  |
| 11 | Process:  Life Insurance |  |  |  |
| 12 | Process:  Retirement Plan |  |  |  |
| 13 | **Monthly take-home income** |  |  |  |

**Job Summary Table 2**

|  |  |  |
| --- | --- | --- |
| Job | Permanent Position | Contract Position |
| Income Information |  |  |
| Process |  |  |
| Gross Annual Income |  |  |
| Process |  |  |
| Gross Monthly Income |  |  |
| Process |  |  |
| After Tax Monthly Income |  |  |
| Process:  Life Insurance |  |  |
| Process:  Retirement Plan |  |  |
| **Monthly Take Home Income** |  |  |