

MAT 110 IN - Lab 5 - Due: Mon, Apr 20 (by 11:59 pm)

Reviewing Module 4 Material

Student's First and Last Name: _____

Group Member's Names (if applicable):

1. _____

2. _____

Objectives:

1. Understand budgets, cash flows, spending patterns, worthwhile expenses, etc.
2. Determine if an amount spent is extravagant
3. Prorate expenses and find the monthly expense
4. Find a net monthly cash flow

Managing Calvin's Budget

Part 1: Calculating Income

Calvin is a college kid who works at a local hardware store. He has been working at this store for over 3 years. Over the years Calvin has proven himself to be a hard-worker and it has paid off. He started his job making \$8.00 an hour. It is this company's policy to give every employee a 1.5% raise after they have worked with the company every 6 months. Two months after working there two years, a customer told Calvin's boss how helpful that Calvin was. Calvin's boss gave Calvin a 10% raise right on the spot. Then before the end of his third year Calvin was promoted to assistant floor manager which granted him another 10% pay raise.

1. Complete the chart below to calculate how much Calvin is making per hour today. Round each New Pay to the nearest penny and write the correct units each time. (14 Points)

	Current Base Pay	Raise	New Pay
Started job	\$8.00	1.5%	$\$8.00 + (8.00 \times 0.015) = \8.12
At 6 Months	\$8.12	1.5%	$\$8.12 + (8.12 \times 0.015) = \8.24
At 12 Months	\$8.24	1.5%	
At 18 Months		1.5%	
At 24 Months		1.5%	
On-the-spot Raise		10%	
At 30 Months		1.5%	
Promotion		10%	
At 36 Months		1.5 %	**** ****

2. Calvin has worked at this job for 3 years. How much does Calvin currently make per hour? Write the correct units with your answer. (5 Points)

Calvin is going to school to get his degree in business. He really wants to become manager of the hardware store, but the position requires a 4 year degree. Since the owner of the business knows Calvin is in school he lets Calvin choose his own schedule. Between classes and studying Calvin works 22 hours a week and every other week he works an extra 8 hours on Saturday. This means Calvin works 22 hours one week, and 30 hours the next week. He gets paid for those hours **every two weeks on his bi-weekly pay check**.

3. What is Calvin's bi-weekly gross pay? Write the correct units with your answer. (4 Points)

Part 1: Calculating Income continued

Go to this website to find out about how much Calvin will take home with every bi-weekly pay check. This website gives an estimate of taxes and other deductions from a normal paycheck. Calvin is currently not married and has no allowances. He is also living in the state of North Carolina. <http://www.paycheckcity.com/calculator/salary/result>

Hint: Once you have used the link above, click on **select your state** and then select **North Carolina**. Enter your **Gross Pay** answer from #3, select **Pay Per Period** from Gross Pay Method, and select **Bi-weekly** from Pay Frequency. Then scroll down and click on **Calculate** to view the **Net Pay**. (We are using the fact that Calvin lives in North Carolina, is single, and has no allowances.)

4. Using Calvin's bi-weekly gross pay, how much money will Calvin take home (net pay) with each bi-weekly paycheck? Write the correct units with your answer. (4 Points)

5. How much take-home pay does Calvin make per hour? Round to the nearest penny and write the correct units with your answer. (4 Points)

Calvin also receive financial assistance from his parents. His parents provide him \$120 a month and pay for his school, car, and phone bill. His grandmother also sends him a check for \$50 each month.

6. How much total income does Calvin receive each month? Use: **1 month = 4 weeks** and write the correct units with your answer. (4 Points)

Part 2: Calculating Expenses

Now that we know Calvin's monthly income, let's make sure that he is not spending more money that he brings in.

Calvin did some figuring and came up with his normal monthly expenses:

Rent: \$500
Internet/Cable (his portion) \$50
Utilities (his portion) \$60
Gas \$80
Groceries \$180 (Plans on cooking his own food for the month)

7. How much are Calvin's monthly expenses? Write the correct units with your answer. (3 Points)

Part 2: Calculating Expenses continued

8. Does Calvin bring home enough money to cover what he calculated his monthly expenses to be? Explain why or why not and write the correct units with your explanation. (4 Points)

Calvin did a pretty good job coming up with his major monthly expenses, but he did forget about some little things:

- Every Monday and Wednesday Calvin has class on the side of the campus by the grill. He gets a chicken wrap and a drink for \$3.20.
 - Before his night class on Wednesday he swings by the campus store and gets an energy drink that cost \$3.20.
 - He goes into work early on Tuesday and Thursday so he stops at the local store to get a coffee. Their coffee is not that good, but it only cost \$1.15.
 - On Thursday night he and his roommate usually go out and watch the football game at a local restaurant. Calvin always orders chicken wings that are on sale on Thursdays. He gets 10 wings for \$4.50. He drinks water, but leaves the waitress a \$2.00 tip.
 - On Friday night Calvin usually goes out to the local club. Calvin does not drink, but the club he goes into has a \$5.00 cover.
9. **Complete his Monthly Expense Chart** including the items described above. Use: **1 month = 4 weeks** and write the correct units with your answers. (12 Points)

Rent	\$500
Internet/Cable	\$50
Utilities	\$60
Gas	\$80
Groceries	\$180
Chicken Wrap and Drink	
Energy Drink	
Coffee	
Chicken Wings and tip	
Club Entrance	
Total Expenses	

10. With these additional expenses does Calvin bring home enough money to cover his monthly expenses? Explain why or why not and write the correct units with your explanation. (4 Points)

Part 2: Calculating Expenses continued

After this month his dad said that he would continue to pay for his school, car, and phone bill, but cannot give Calvin \$120 anymore. Furthermore, Calvin's grandmother would be entering a nursing home and would no longer be able to provide him \$50 a month.

11. With losing the income from his family, how much total monthly income does Calvin have? Write the correct units with your answer. (4 Points)

12. Will Calvin still bring home enough money to cover his monthly expenses? Explain why or why not and write the correct units with your explanation. (4 Points)

13. What are some things that Calvin could do to save or obtain more money? Use complete sentences. (4 Points)

Part 3: Making a Budget

Calvin was concerned about his finances and decided to ask his boss for more hours at the hardware store. His manager agreed and allowed him to work 8 hours on the Saturday's Calvin was usually off. This means that Calvin is now working 30 hours every week.

14. What is Calvin's new bi-weekly gross pay? Write the correct units with your answer. (4 Points)

Go to this same website to find out about how much Calvin will take home with every bi-weekly pay check and use the same steps as before for Calvin's **new** bi-weekly gross pay.

<http://www.paycheckcity.com/calculator/salary/result>

15. How much money will Calvin take home (net pay) with each bi-weekly paycheck? Write the correct units with your answer. (4 Points)

Part 3: Making a Budget continued

16. What is Calvin's monthly income? Use: **1 month = 4 weeks** and write the correct units with your answer.
(4 Points)

Even though Calvin is making more money, he is still concerned about the future and would like to start putting \$75.00 into a saving account each month. Furthermore, Calvin feels like he should be helping his dad with the cell phone bill by giving him \$60 each month. However, Calvin does not want to be a total prude and would still like to go out with his friends from time to time. This means that Calvin would like to have some of his previous expenses such as going to the club, having an occasional energy drink and other things he likes to do.

17. **Complete the chart below** to help Calvin create a budget that allows him to pay his bills, eat out, see his friends, and allows him put money into a checking account **without exceeding his monthly income**.
Use: **1 month = 4 weeks** and write the correct units with your answer. (18 Points)

Rent	\$500
Internet/Cable	\$50
Utilities	\$60
Gas	\$80
Groceries	\$180
Savings Account	\$75
Cell Phone Bill	\$60
Chicken Wrap and Drink	
Energy Drink	
Coffee	
Chicken Wings and tip	
Club Entrance	
Total Monthly Expenses	