

**Part A: You are to track Steph's monthly cash flow. You are to answer a series of questions. Please answer the questions in the given space provided.**

1. [1 point] Steph's salary is \$86,000 a year. This is her gross yearly salary; her salary before taxes is deducted. What is her gross **monthly** income?

\$ \_\_\_\_\_

2. [1 point] Suppose 25% of her salary is taken out for taxes. How much tax does Steph pay each month?

\$ \_\_\_\_\_

3. [1 point] Compute Steph's monthly take-home pay. This is her **net** pay; the actual amount available to Steph from her paycheck.

\$ \_\_\_\_\_

**Steph decides it's time to buy a house. Buying a house depends on many factors such as interest rates, length of the loan, down-payment, your credit worthiness, etc. Typically your monthly mortgage payment accounts for 30% of your gross monthly income. We have two scenarios to consider:**

She finds a house for \$321,000. Steph can afford a down-payment of \$35,000.

4. [1 point] What is the size of the mortgage she needs to obtain from the bank to purchase her house?

\$ \_\_\_\_\_

Scenario 1:

a. [1 point] If Steph has good credit, she will be able to finance the mortgage amount at 3.5%, compounded monthly for 30 years. How much will her monthly mortgage payment be?

\$ \_\_\_\_\_

b. [1 point] The bank also offers a different scenario: finance the mortgage amount at 2.875%, compounded monthly for 15 years. How much will her monthly mortgage payment be?

\$ \_\_\_\_\_

Scenario 2:

- c. [1 point] If Steph does not have good credit, she will be able to finance the mortgage amount at 4.75%, compounded monthly for 30 years. How much will her monthly mortgage payment be?  
\$ \_\_\_\_\_
- d. [1 point] The bank offers a different scenario where she finances the mortgage amount at 4.375%, compounded monthly for 15 years. How much will her monthly mortgage payment be?  
\$ \_\_\_\_\_
5. Steph does have good credit, so she decides to go with **Scenario 1a**. How much will her monthly mortgage payment be?  
\$ \_\_\_\_\_
6. [½ point] Property taxes are \$7800 a year. The bank will spread this amount over 12 months and include it into your monthly mortgage payment. This is called ESCROW. How much is Steph's escrow payment?  
\$ \_\_\_\_\_
7. [½ point] Now that Steph has bought a home, she will need to protect it. Steph purchases homeowner's insurance, which is a yearly charge of \$382. She budgets for monthly payments. How much is her monthly homeowner's payment?  
\$ \_\_\_\_\_
8. [½ point] Water, electricity, trash pickup, and natural gas are other expenses that cost additional money each month. Steph spends \$68 per month for water and \$25 per month for trash, \$75 per month for electricity, and \$62 per month for natural gas. How much does she spend total for these utilities?  
\$ \_\_\_\_\_
9. Steph's cell phone bill is \$72 a month.

10. TV service and internet costs \$85 a month.
11. [1 point] A general rule for savings is you should save at least 8% of your take-home income. Steph decides to save 5% of her take-home income. How much is she putting towards her savings each month?  
\$ \_\_\_\_\_
12. [1 point] Another rule of thumb is you should have at least 3 months worth of your take-home income in your savings in case you lose your job or an emergency occurs. How much is 3 months worth of her take-home income?  
3 months worth of take-home income: \$ \_\_\_\_\_
13. Let's not forget about food. After a month of tracking her food spending, she finds she spends \$120 on restaurants and \$275 on groceries.
14. [1 point] Steph borrows \$12,500 to buy a car and have it paid off in 4 years. Since she has good credit, she finances the car at 1.9%. What is her monthly car payment?  
\$ \_\_\_\_\_
15. [½ point] Now that Steph has a car, she will have to purchase car insurance. Steph buys a policy that costs \$900 per year. She pays her insurance bill monthly. What is her monthly car insurance payment?  
\$ \_\_\_\_\_
16. No one can drive a car without purchasing gas. After tracking a month's worth of spending, Steph finds she spends \$165 a month in gas.
17. Steph finds she spends \$60 a month on new clothes and \$140 a month on entertainment.
18. Steph also has some credit debt. She currently spends \$195 per month on her credit cards.
19. After graduating from college, Steph started paying back her student loans. Her monthly student loan payment is \$230 per month.

20. Fill in Steph's *monthly* budget flow chart. Make sure your income available after expenses is the same as (or close to)

\$1222.51.

[5 points]

## Monthly Budget Flow Chart

Income	
Job	
<b>Total Income</b>	

Monthly Budget Summary	
Total Income	
Total Expenses	
<b>Net</b>	

Home Expenses	
Mortgage	
Escrow	
Homeowner's Insurance	
Electricity	
Gas/Oil	
Water	
Trash	
Phone	
Cable/Internet	
<b>Total Home Expenses</b>	

Daily Living	
Groceries	
Clothing	
Dining/Eating out	
Entertainment	
<b>Total Living Expenses</b>	

Savings	
Transfer to Savings	
<b>Total Savings</b>	

Transportation	
Car Payment	
Car Insurance	
Fuel	
<b>Total Transportation</b>	

Obligations	
School Loans	
Credit Cards	
<b>Total Obligations</b>	