**Math 11 AWP Unit 2 – Personal Budgets**

Assignment 5 – More analysing budgets

1. Petra has created the following monthly budget.

|  |  |  |  |
| --- | --- | --- | --- |
| *Petra’s Monthly Budget* | | | |
| *Income* | | *Expenses* | |
| Regular | $1400.00 | Rent | $550.00 |
|  |  | Utilities, phone, cable, internet | $175.00 |
|  |  | Food | $325.00 |
|  |  | Transportation | $75.00 |
|  |  | Entertainment | $50.00 |
|  |  | Clothing | $100.00 |
|  |  | Miscellaneous | $100.00 |
|  |  | Charitable donations | $25.00 |
|  |  | Savings | $100.00 |
| *Total income* | *$1400.00* | *Total expenses* | *$1500.00* |

1. Petra’s budget has a deficit. Suggest how she can adjust her spending to create a balanced budget. Explain your reasoning.
2. Construct a circle graph that shows Petra’s new budget.
3. Sammy earns about $1500.00 per month and has the following expenses.

|  |  |
| --- | --- |
| Expenses | |
| Housing | $400.00 |
| Food | $225.00 |
| Transportation | $350.00 |
| Entertainment | $250.00 |
| Charitable donations | $25.00 |
| Savings | $50.00 |
| Other | $200.00 |

1. He has found the following spending guidelines for people living in his area.

|  |  |
| --- | --- |
| Spending Guidelines | |
| Housing | 25-35% |
| Food | 10-20% |
| Transportation | 10-15% |
| Entertainment | 5-10% |
| Charitable donations | 2-10% |
| Savings | 5-10% |
| Other | 5-10% |

How does his spending compare to the guidelines? In what categories does he need to adjust his spending?

1. If Sammy does not make any changes to his spending, how much money will he save in one year?
2. Make a new budget for Sammy that falls within the spending guidelines. Construct a circle graph that shows his new budget.
3. Willa earns $3532.00 a month and has been given the following budget guidelines.

|  |  |
| --- | --- |
| Spending guidelines | |
| Housing | 30-35% |
| Utilities | 5-10% |
| Transportation | 8-12% |
| Debt repayment | 0-12% |
| Savings | At least 10% |
| Food | 12-18% |
| Recreation | 6-12% |
| Health and personal care | 8-15% |

Willa’s housing costs are $1250.00 per month, and her utilities cost $235.00 per month. Willa wants to save 15% of her money and pay off her loans as fast as possible.

1. Construct a conservative budget for Willa.
2. Make a circle graph to show her spending
3. Manjeet earns $550.00 per week.
4. If he saves 14% of his salary, how much will he save in one year?
5. Manjeet’s salary increases by 5% and he continues to save 14%, how much more will he save in one year?
6. Lena puts $3150.00 a year into savings. This represents7% of her income.
7. She would like to increase her savings to 10% of her income. How much will she save in one year is she makes this change?
8. What is her annual income?
9. Sean is creating a monthly budget.

|  |  |  |  |
| --- | --- | --- | --- |
| *Sean’s Monthly Budget* | | | |
| *Income* | | *Expenses* | |
| Semi-monthly pay | $1300.00 | Housing | $1200.00 |
| Semi-monthly pay | $1300.00 | Utilities | $175.00 |
| Monthly tips | $150.00 | Phone, cable, internet | $150.00 |
|  |  | Food | $325.00 |
|  |  | Transportation | $150.00 |
|  |  | Entertainment | $125.00 |
|  |  | Clothing | $175.00 |
|  |  | Miscellaneous | $100.00 |
|  |  | Charitable donations | $50.00 |
|  |  | Medical/health and other emergencies | $100.00 |
|  |  | Savings | $200.00 |
| *Total income* | *$* | *Total expenses* | *$* |

1. Calculate his total income and expenses. Is his budget balanced?
2. Create a circle graph of Sean’s spending

1. Spending guidelines suggest housing should account for 30-35% of total income. Is Sean’s spending within these guidelines? What is the maximum amount he should spend on housing?
2. Sean has decided that he does not want to move, but he wants to increase his savings to 15% so that he has enough money for a holiday next summer. Suggest ways in which he could adjust his budget to do this?
3. Gabriella’s monthly budget is shown here.

|  |  |  |  |
| --- | --- | --- | --- |
| *Gabriella’s Monthly Budget* | | | |
| *Income* | | *Expenses* | |
| Semi-monthly pay | $995.00 | Housing | $840.00 |
| Semi-monthly pay | $995.00 | Food | $175.00 |
|  |  | Transportation | $125.00 |
|  |  | Entertainment | $175.00 |
|  |  | Clothing | $175.00 |
|  |  | Miscellaneous | $150.00 |
|  |  | Loan repayment | $275.00 |
|  |  | Savings | $75.00 |
| *Total income* | *$1990.00* | *Total expenses* | *$1990.00* |

The suggested spending guidelines are as shown.

|  |  |
| --- | --- |
| Spending Guidelines | |
| Housing | 30-35% |
| Food | 8-15% |
| Transportation | 8-12% |
| Debt repayment | 0-12% |
| Entertainment | 8-12% |
| Personal | 8-12% |
| Savings | At least 10% |

1. Create a circle graph of Gabriella’s spending
2. Calculate which of Gabriella’s spending categories need adjusting according to the guidelines, and by about how much.
3. At her current rate of savings, how long will it take Gabriella to save $1000.00. If she wanted to save that amount in 6 months, by how much would she have to increase her savings per month? Would her savings fall within the guidelines?