0.1 - Savings & Planned Purchases

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Math 9 Name: ____________________ Block:______

Chapter 0: Finance

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0.1 Savings and Planned Purchases

You'll all be getting your first jobs soon which means you'll be getting paid usually every two weeks.

When you're living with your parents, most of your expenses will be paid by them which means you get to keep pretty much all your money (aside from deductions, but you'll learn about that next year).

For this section however, we're going to pretend that you are living on your own and need to pay for things such as bills.

The first thing we need to sort out before we start saving is our expenses. There are two kinds of expenses:

Fixed **expenses:** Expenses that always, always, <u>always</u> cost the same amount.

Variable **expenses:** Expenses whose value changes from month to month.

Some examples:

Fixed:	**Variable:**
- Car Insurance	- Gas
- Netflix/Disney+	- Groceries
- Phone bill (if you don't go over)	- Utilities

When you add up all your expenses and compare them to how much you're making (your **income**) to see how much you have left to save, you're making a **budget**.

Generally (usually calculated monthly):

Income – Expenses = Savings

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Savings are very important to have. Savings are used as a sort of "emergency fund" when an unexpected expense arises that you normally wouldn't be able to pay for. For example, if you crash your car and need to pay for repairs so you can get to school or work, that can sometimes run in to the thousands of dollars. Without a savings fund, you may be unable to repair your car.

Example 1: A simple budget:

Let's say for example your job pays you $900 after deductions every 2 weeks. The following is a list of expenses you must pay this month: rent ($900), groceries ($100), utilities ($120), cell phone ($70). How much money will you be able to put in to your savings account at the end of the month?

$900 / 2 weeks
x2 for a 4-week month

Income = $1800

Expenses: $900
$100
$120
+ $70
$1190

Savings = Income - Expenses
= ~~1800~~ - 1190
= $610

When making a budget for yourself, you should also include expenses such as entertainment (going to see a movie, shopping, video games, etc.) or clothing. You gotta enjoy yourself, right? One way to do this is to decide on a fixed amount that you will dedicate to savings as an expense, and any left-over money can be used as an "entertainment fund".

Example 2: Making a dedicated savings account:

Use the scenario from example 1 as your income / expenses. Some institutions have agreed that you should dedicate 20% of your income to savings. Following this suggestion, how much money should we dedicate to savings each month, and how much is left over for our entertainment fund?

$20\% \xrightarrow{\text{decimal}} 0.2$

$\$1800 \times 0.2$

$= \$360$

$\$610$ in left over
$- \$360$ to savings
$\$250$

$\therefore$ $\$250$ left for entertainment.

Finally, you may want to buy something that is expensive, such as a used car or a vacation that you can't afford off one pay cheque. We call this a "**planned purchase**", and it is something you need to be careful when budgeting. Money for your planned purchase cannot come out of your expenses or your savings. A planned purchase is not an "unexpected expense" to use your savings on. Therefore, it's coming out of your entertainment fund.

The question is how much are you now going to budget for your planned purchase, and how long will you need to wait to be able to afford it?

You get to decide how much you're putting away for your planned purchase, but keep in mind that the more you put away, the less you will have for entertainment each month, and the less you put away, the longer you will have to wait to afford it.

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Example 3: Budgeting a planned purchase:

Again, let's use the scenario from example 1 and 2. We now know how much we have for an entertainment fund and how much we're putting away for savings. Let's say for example you want to go on a vacation to Mexico that will cost you $800 for everything. How long would it take you to save for your trip if you dedicate $100 / month to save for it? $130 / month?

$250 in entertainment.

$$\frac{\$800 \text{ trip}}{\$100/\text{month}} = 8 \text{ months}$$

$$\frac{\$800 \text{ trip}}{\$130/\text{month}} \cong 6.2 \text{ month}$$

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Assignment: Worksheet 0.1
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