financialalgebra

4.6 Budgeting for Fixed Costs

Student Activity Packet

UNIT: BUDGETING & SYSTEMS OF INEQUALITIES

Name:

IN THIS LESSON, YOU WILL:

- Represent constraints by equations or inequalities
- Understand how changing parameters alters inequalities with two variables
- Understand factors that affect net worth
- Differentiate between fixed/variable expenses and needs/wants
- Consider common fixed costs and explore various ways to reduce them
- Specifically assess housing costs and how to reduce them
- Identify government aid programs to assist with expenses



INTRO

DATA CRUNCH: How Much Income Do You Need To Be Rich?

Analyze the data and answer the questions on this worksheet to complete the Data Crunch.



LEARN IT

VIDEO: What is Wealth?

In the previous resource, you looked at people's opinions of what it means to be 'rich' or 'poor' and saw how that was a very relative measure. Read this article for a more concrete explanation of what wealth is, then answer the following questions.

1. **What is the definition of wealth according to this video?**

2. **What would keep someone with a high income from being wealthy?**

3. **What do you think are the top three MOST IMPORTANT regular expenses for most people?**

4. **How could budgeting help someone build their wealth no matter what their income is?**

5. **Do you think there are any situations where a person would not be able to build wealth? Explain.**

ACTIVITY: MOVE: Organize Budget Expenses

Follow your teacher's instructions to complete this activity about budgeting for different expenses.

1. **Summarize the difference between variable and fixed expenses.**

2. **Place the expenses from the MOVE activity into the chart below where you think they go (Fixed Needs, Fixed Wants, Variable Needs, or Variable Wants).**

	NEEDS	WANTS
FIXED		
VARIABLE		

3. **Which do you think has a bigger impact on your finances as a student (fixed or variable)?**

4. **Do you think that would be different as an adult? Why or why not?**

5. **If you wanted to save money, would it be easier to cut down on fixed expenses or variable expenses? Why?**

6. **Do you think you'd save more money by reducing your fixed or variable expenses? Why?**

ARTICLE: How to Reduce Housing Costs: 23 Ways to Lower Housing Expenses

Housing costs (rent or mortgage) are the largest single expense for most households. Skim this article for tips on various ways you can save on housing expenses.

1. **Pick your three favorite strategies to read in more detail. Explain why you felt they were important.**

ARTICLE: Top 10 Ways To Reduce Your Fixed Expenses

Housing may be the largest, but it's not the only fixed expense in your budget. There are many different ways to approach budgeting with all your fixed expenses. Take a look at these ten tips for saving money on fixed expenses, then pick **ONE** tip and answer the following questions for that resource.

1. **Pick ONE tip and list how this tip could benefit someone who uses it**

2. **For that same tip, list reasons why someone would NOT follow that advice, whether because they're not able to or don't want to.**

INFOGRAPHIC: Government Benefits

In addition to steps you can take on your own, there are resources that can help you balance your finances on a tight budget. The federal government is just one provider of these types of resources.. Take a look at this infographic highlighting government benefits programs available, then answer the following questions.

1. **Describe one thing you learned about benefits available to American citizens from the federal government.**

2. **There are many families that do not receive the benefits they qualify for. What do you think are some reasons eligible families might not take advantage of these resources?**

MATH CONNECTION -PERCENTS AND INEQUALITIES

ARTICLE: Here's how much it costs a single person to live in the 15 largest US cities

Use this article and the information to answer the following questions about housing costs and the cost of living in some of the United States's largest cities.

1. **Indianapolis has the lowest housing cost on this list. What percent of the total cost of living does housing represent there?**

2. **San Francisco has the highest housing cost on this list. What percent of the total cost of living does housing represent there?**

3. **The federal government defines a person to be housing-burdened if their housing costs are at least 30% of their income (not 30% of the cost of living). If you earn the national median wage of $61,937...**
    a. What is your minimum annual housing cost to be considered housing-burdened?

    b. In which of these cities would you be considered housing-burdened?

4. **You live in New York City and currently spend $40/day on variable expenses and $3197/month on fixed expenses. Write an equation that models your total monthly expenses based on how many days have passed since the beginning of the month.**

5. **You make exactly the cost of living in New York from the article as your salary. Write an inequality that would have to be true to make sure that you do not go over your monthly budget.**

6. **Is your budget feasible for a month, assuming a month is 30 days? How do you know?**

7. **You want to try adjusting your fixed expenses in order for the scenario in question 5 to be within budget.**
    a. Calculate how much your fixed expenses need to be in order to stay within budget on $40

per day.

b. Write a new linear equation to model your monthly spending after x days.

8. **Now instead, you want to try adjusting your variable expenses in order for the scenario in question 5 to be within budget.**
   a. Calculate how much your variable expenses need to be in order to stay within budget having $3197 in fixed, monthly expenses.

   b. Write a new linear equation to model your monthly spending after x days.

9. **Which budget change would you rather make, fixed or variable. Why?**



EXIT TICKET

Follow your teacher's instructions to complete the Exit Ticket.

Teachers, you can find exit ticket questions on the Lesson Guide.