11- 3 Charting a Budget

ADVANCED FINANCIAL ALGEBRA

Budget Chart

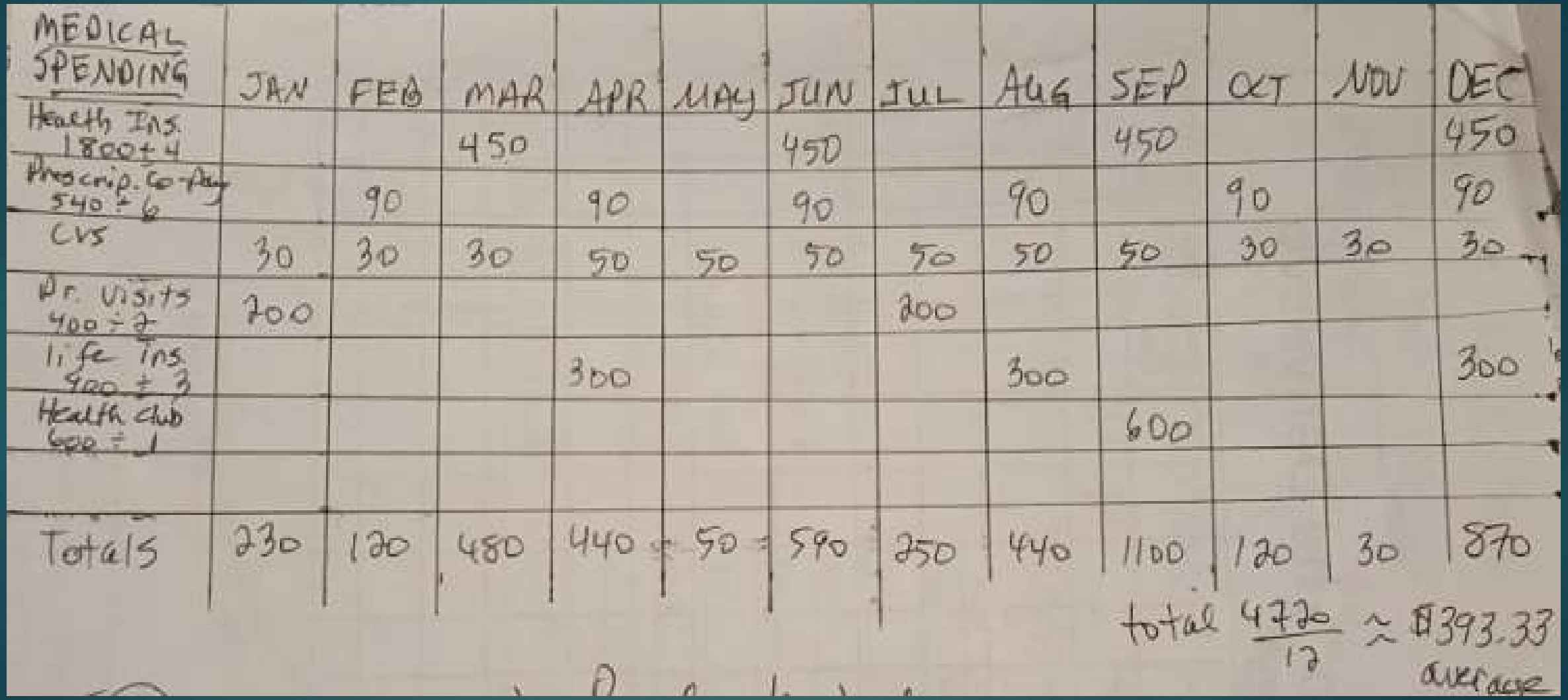
- A budget chart contains information regarding when certain expenses occur and how much they cost over a year's time.
- It also tells what portion of spending is allocated to certain categories of expenses.

"It's a type of credit card that self destructs when it reaches the limit I've set for you."

Example #1 year-long budget

- Create a year-long budget chart to track JUST medical spending:
  - Quarterly health insurance (March, June, September, December) = $1800/year
  - Bimonthly prescription copayments (starting in February) = $540/year
  - CVS pharmacy (Jan., Feb., Mar., Oct., Nov., Dec. = $30), all other months $50
  - Bi-annual doctor visits (January and July) = $400/year
  - Tri-annual life insurance (April, August, December) = $900/year
  - Annual Health club (gym) dues (September) = $600/year

Example #1 SOLUTION



MEDICAL SPENDING	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Health Ins. 1800 ÷ 4			450			450			450			450
Prescrip. Co-Pay 540 ÷ 6		90		90		90		90		90		90
CVS	30	30	30	50	50	50	50	50	50	30	30	30
Dr. Visits 400 ÷ 2	200						200					
Life Ins. 900 ÷ 3				300				300				300
Health club 600 ÷ 1									600			
Totals	230	120	480	440	50	590	250	440	1100	120	30	870

total $\frac{4720}{12} \approx \$393.33$ average

Example #3 – transportation expenses

Kate and Paul budget $800 per month for transportation-related expenses, as shown in the pie chart. What information can you conclude from the pie chart?

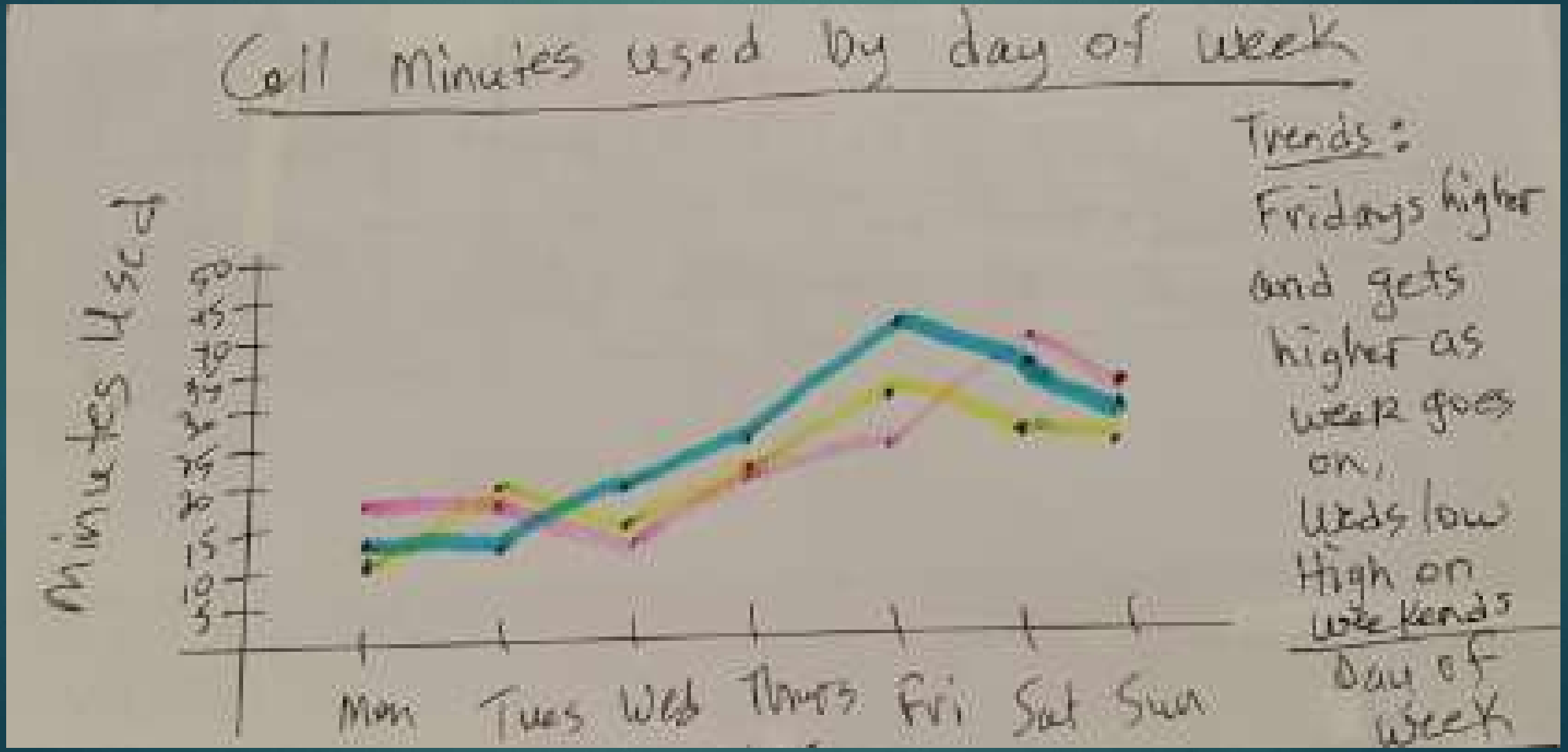
- They spend the largest portion of their money on fuel (gas) ¼ (800) = $200
- They do not spend much on car washes (smallest expense) – may have a dirty car?
- Expenditures on train/bus ≈ expenditures on parking
- Expenditures on insurance ≈ expenditures on repairs

Example #5 – change plans?

Over the last few months Kate has spent more than her budgeted amount for her cell phone bill. She decided to track her daily call usage in minutes to see if she should change plans. She went online to her cell phone account and got the usage data below for the last 3 weeks. Construct a multiple line graph to identify any of Kate's usage trends.

	Week 1	Week 2	Week 3
Mon	18	10	13
Tues	17	19	12
Wed	12	15	18
Thurs	19	20	23
Fri	24	29	40
Sat	35	24	30
Sun	30	22	27

Example #5 – change plans graph/trends



Example #5 continued - suggestions

- Kate should look for a weekend plan to reduce her costs.
- She may also want to consider getting a plan with unlimited use.

Assignment: pg 685 #1, 3, 8, finish intro. slide, auto expense slide, housing expense slide, and food budget slide, then create a year-long budget spreadsheet (like page 678 Sample B) for budget project

- 1) "*Any sensible family has a budget that lays out how much will be spent for household and other purposes. Without such planning, things would quickly go awry*." – Walter Ulbricht, politician

- Explain how that quote can be interpreted in light of what you have learned in this lesson.

- 3) Create a year-long budget to chart these expenses: Savings: $600 bimonthly (starting in Jan); retirement account: $2,000 quarterly; checking account: $1,000 semi-annually; real estate taxes: $1,300 every 4 months beginning in April.

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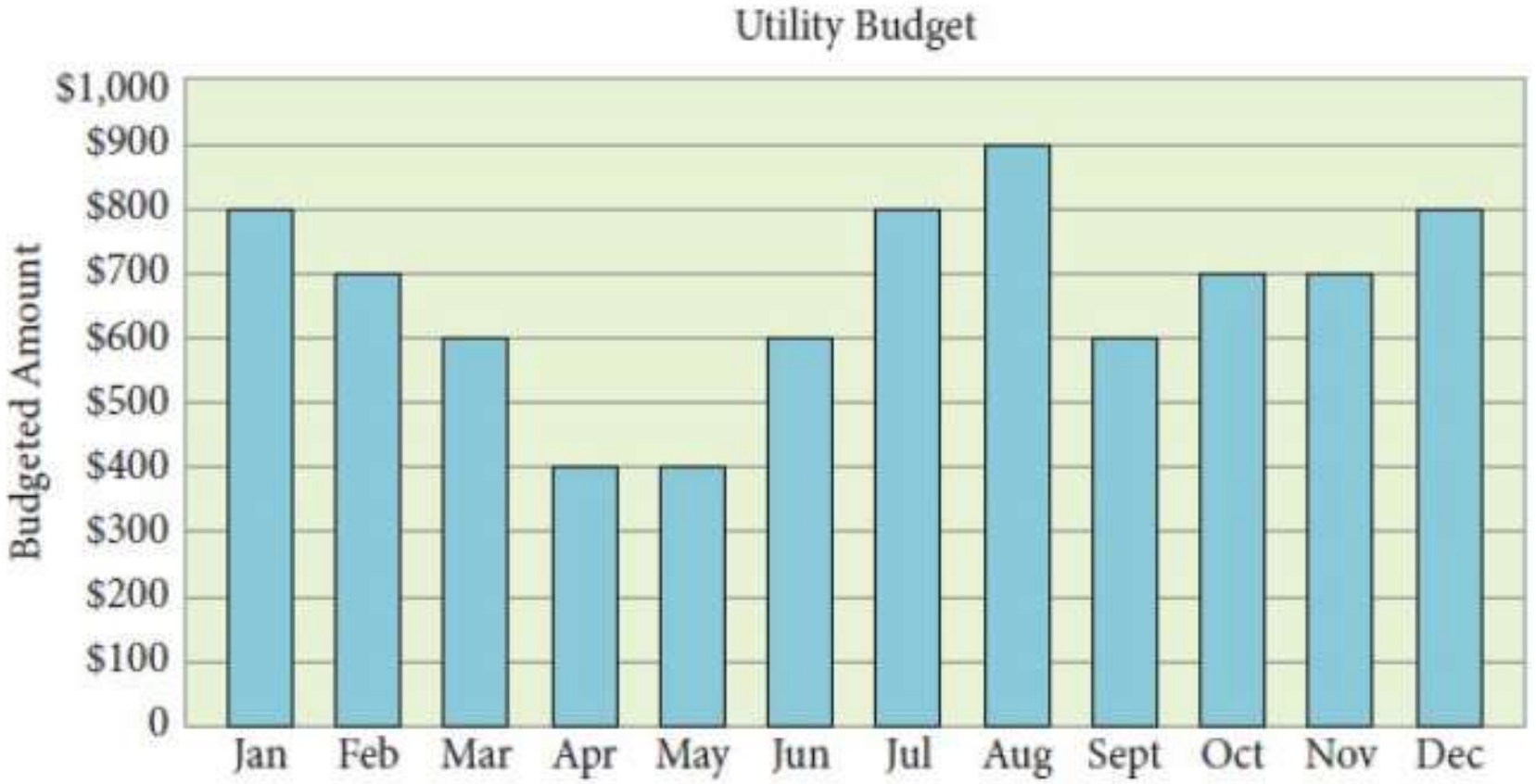
- 8)

Examine the following bar graph that shows budgeted monthly utility expenses for a one-year period.



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- 8 continued)

a. In which months was the same amount budgeted? (spell out the months, place them in order from January to December, and place commas in between them)

$800 _____

$700 _____

$600 _____

$400 _____

b. What is the total annual amount budgeted for utilities? _____

c. What percent of the total yearly amount was budgeted for the warm-weather months of June–September? _____

d. Between which two consecutive months was there a 33 1/3% drop in the amounts budgeted for utilities? _____

e. At the end of December in the year shown, the homeowners replaced their furnace with a more energy-efficient one. They were told that they could decrease their utility budget for the upcoming month of January by 20% from the previous January amount. How much will they budget for utilities in January? _____