

BUDGETING AND CASH FLOW

Fixed, Variable & Periodic Expenses

Detailed practice, calculation, revision, and assessment

GRADES 9-12	TIME 2 x 42 min	GROUPING I / pairs / whole	PRODUCT Expense map and sinking-fund plan
YOUR CHALLENGE Classify expenses by amount behavior and timing, convert predictable nonmonthly costs into monthly set-asides, detect a hidden budget understatement, and design a sinking fund that prevents a known bill from becoming a crisis.			

Two Dimensions, Not One Label

Dimension	Question	Examples
Amount behavior	Is the amount stable or variable?	Rent may be fixed; electricity may vary.
Timing	Does it occur monthly or periodically?	Annual dues and six-month insurance are periodic.
Adjustability	How much control exists before the due date?	A renewal choice may differ from a current obligation.
Consequence	What happens if it is delayed?	Loss of service may matter more than the label.
KEY IDEA An expense can be both variable and periodic. “Periodic” describes timing; “variable” describes amount.		

Part 1 - Classify with Evidence

Expense	Amount/timing	Fixed?	Variable?	Periodic?	Evidence / uncertainty
Rent	\$900 monthly				
Electricity	\$65-\$125 monthly				
Club dues	\$72 annually				
Car insurance	\$540 every 6 months				
Groceries	\$60-\$95 weekly				
Streaming	\$16 monthly				
School supplies	About \$180 each September				
Haircut	\$35 every 6 weeks				

Identify two expenses with overlapping classifications and explain why overlap is more accurate than forcing one label.

Part 2 - Convert Timing into Monthly Set-Asides

Formula: monthly set-aside = target amount ÷ months between payments. For irregular periods, first estimate annual cost and divide by 12.

Periodic expense	Target	Months / annual frequency	Calculation	Monthly set-aside	Account/envelope label
Club dues	\$72	12			
Car insurance	\$540	6			
School supplies	\$180	12			
Haircuts	\$35 every 6 weeks	about 8.67/year			

How much is the monthly budget understated if club dues, car insurance, and school supplies are omitted? Show work.

Extension: include the haircut estimate. State how you converted 6-week timing to an annual or monthly amount.

Part 3 - Build a 12-Month Expense Calendar

Month	Known periodic expense(s)	Amount due	Monthly contribution	Fund balance after payment
Jan				
Feb				
Mar				
Apr				
May				
Jun				
Jul				
Aug				
Sep				
Oct				
Nov				
Dec				

Place the school-supply payment in September and choose reasonable due months for club dues and insurance. Your contributions must begin early enough to cover each payment.

Timing Risk Check

What happens if the plan begins only one month before the insurance bill?

Which target could change at renewal?

Which estimate needs a price check before finalizing the plan?

Part 4 - Sinking-Fund Case

Nia expects a \$480 certification course fee in eight months. She has \$80 saved and can contribute \$45 monthly. A \$60 equipment cost may also be required in month 7.

Measure	Calculation	Answer
Course funding gap		
Required monthly deposit		
Balance after 8 deposits of \$45		
Surplus/shortfall before equipment		
Surplus/shortfall after \$60 equipment		

Design a revision if the plan is short. Change only amounts that are supported by the scenario, and state whether the equipment cost is verified or still uncertain.

Part 5 - Your/Fictional Sinking Fund

PRIVACY OPTION Use a fictional expense. Do not disclose family bills, insurance details, account information, or other private data.

Field	Plan
Expense and reason	
Target cost and evidence	
Current amount	
Funding gap	
Months/pay periods until due	
Deposit each period	
Storage/account label	
First three milestones	
Price-check date	
Adjustment trigger	

Write a short explanation distinguishing the target expense from a true emergency. Explain how the sinking fund changes the monthly budget and what would happen if the expense amount changes.