

APPLIED ECONOMICS

Measuring Inflation and Purchasing Power

Detailed practice, calculation, decision-making, and assessment

GRADES 9-12	TIME 2 x 42 min	GROUPING I / pairs / whole	PRODUCT Brief
YOUR CHALLENGE Calculate index inflation and personal price change, compare nominal and real income, and create an evidence-based budget adjustment.			

Economic Choices Require Evidence About Trade-Offs, Prices, and Purchasing Power

Inflation is a broad rise in the average price level over time, but each household may experience a different spending impact. Purchasing power depends on how income changes compared with the prices of the goods and services a person buys.

Term	Student-friendly meaning
Price index	Number tracking average price change for a defined basket and population.
Inflation rate	Percentage change in a price index over a period.
Nominal income	Income measured in current dollars.
Real income	Income adjusted for changes in prices.
Purchasing power	Amount of goods and services money can buy.
Personal basket	A person's own pattern of spending categories and amounts.
CLASSROOM USE All people, employers, figures, brackets, and documents in this packet are fictional. Never place a real Social Security number, employer ID, bank number, or tax document in classroom work.	

Part 1 - Calculate an Inflation Rate

Use a fictional price index: Year 1 = 250.0; Year 2 = 257.5; Year 3 = 265.2.

Period	Equation	Inflation rate
Year 1 to 2		
Year 2 to 3		
Year 1 to 3		

Inflation rate = (new index - old index) / old index x 100. Round to one decimal place.

Part 2 - Build a Personal Price Change

A student’s monthly basket changes as shown.

Item	Old spending	New spending	Dollar change	Percent change
Transportation	\$120	\$132		
Food	\$180	\$198		
Phone	\$55	\$55		
Entertainment	\$75	\$69		
School supplies	\$40	\$46		
Total				

Calculate the student’s total percentage change and compare it with the fictional index.

Part 3 - Measure Purchasing Power

A monthly allowance rises from \$500 to \$510 while the student basket rises from its old total to new total.

Measure	Equation	Result
Income growth		
Basket inflation		
Approximate real change	income growth - basket inflation	
Old basket quantities affordable with \$510	\$510 / new basket cost	

Explain nominal versus real change without claiming the approximation is exact.

Part 4 - Evaluate Responses to Rising Prices

Use evidence, not slogans.

Response	Possible benefit	Possible cost/trade-off	Who is affected	Evidence needed
Switch brands				
Reduce quantity				
Delay purchase				
Increase income				
Use savings				

Distinguish temporary adjustments from sustainable plans.

Part 5 - Write an Inflation-Aware Budget Adjustment

Recommend how the student should respond while protecting essentials and savings goals.

Decision check	My evidence
Index inflation	
Personal basket change	
Income growth	
Real change	
Largest increases	
Possible substitutions	
Savings risk	
Qualified plan	

Write 150-200 words using at least six figures and three concrete actions.