

THE CHALLENGE

Maria earns a gross salary of \$3,500 per month. After federal income tax (15%), state income tax (4%), Social Security (6.2%), Medicare (1.45%), health insurance (\$180), and her 401(k) contribution (5%), her total deductions are \$1,287.75. Her actual take-home pay is only \$2,212.25—nearly 37% less than her gross income.

Why is it essential to understand the difference between gross income and net income when creating a personal budget?

Learning Objectives

- Differentiate between gross income and net income.
- Identify mandatory and voluntary deductions from a paycheck.
- Calculate take-home pay after various deductions.

CORE CONCEPTS

Term	Definition
Gross Income	The total amount of money earned before any deductions are taken out.
Net Income	The amount of money you actually receive after all deductions have been subtracted (take-home pay).
Mandatory Deductions	Required deductions including federal/state income taxes, Social Security, and Medicare.
Voluntary Deductions	Optional deductions such as retirement contributions (401k), health insurance, and other benefits.
W-4 Form	A tax form completed when starting a new job that determines how much tax is withheld from your paycheck.

Background: The gap between what you earn and what you receive can be substantial—often 20-30% of your gross income or more. Mandatory deductions (federal/state taxes, Social Security at 6.2%, Medicare at 1.45%) are required by law. Voluntary deductions (retirement contributions, health insurance) are optional but often beneficial. Your W-4 form determines how much federal tax is withheld—too little means owing taxes later; too much means smaller paychecks now.

APPLY IT

PART A: DEDUCTION CLASSIFICATION

Classify each deduction as MANDATORY or VOLUNTARY and explain why.

Deduction 1: Social Security (6.2%)

Type: _____ (Mandatory / Voluntary)

Why: _____

Deduction 2: 401(k) Retirement Contribution

Type: _____ (Mandatory / Voluntary)

Why: _____

Deduction 3: Federal Income Tax

Type: _____ (Mandatory / Voluntary)

Why: _____

Hint: Mandatory deductions are required by law. Voluntary deductions are choices you make about benefits—though choosing NOT to participate may mean missing valuable opportunities like employer matching.

PART B: PAYCHECK CALCULATION

Calculate the net income for this employee. Complete all rows.

Category	Rate/Amount	Deduction Amount
Gross Monthly Income	\$4,000	—
Federal Income Tax	12%	
State Income Tax	5%	
Social Security	6.2%	
Medicare	1.45%	
Health Insurance	Flat	\$200
401(k) Contribution	6%	

Total Deductions	—	
Net Monthly Income	—	

4. What percentage of gross income goes to deductions? (Total Deductions ÷ Gross Income × 100)

5. If this employee stopped contributing to their 401(k), how much MORE would their monthly take-home pay be? Is this a good trade-off? Why or why not?

PART C: PERSONAL APPLICATION

6. Jordan works part-time at \$15/hour for 15 hours per week. What is Jordan's gross monthly income? (Assume 4 weeks per month)

Show your work:

Gross Monthly Income: \$_____

7. If Jordan's total deductions are approximately 18% of gross income, what is Jordan's estimated net monthly income?

CHECK YOUR UNDERSTANDING

1. FICA taxes fund which two programs?

- ☐ A. Medicare and Medicaid
- ☐ B. Social Security and Medicare
- ☐ C. Federal Income Tax and State Income Tax
- ☐ D. 401(k) and Health Insurance

2. Explain why someone's gross income is not a reliable number to use when creating a monthly budget.

3. **Calculation:** An employee has a gross monthly income of \$3,000. Their mandatory deductions total 22% and voluntary deductions total 8%. What is their net monthly income?

Show your work:

Answer: \$_____ net monthly income

4. Alex contributes 6% of his \$40,000 salary to a 401(k) with a 3% employer match starting at age 22. Jamie waits until age 30 to start. By retirement, Alex has approximately \$1.2 million while Jamie has \$640,000. What does this example teach us about voluntary deductions?

5. Reflection: How will understanding net income versus gross income help you plan for both short-term expenses and long-term savings goals?
