

Tax System Analysis Worksheet

Chapter 2.1: Understanding Federal and State Taxes

Understanding Different Tax Systems

This worksheet will help you analyze three different tax systems and understand how they impact people at different income levels. For each system, you'll calculate the tax amount and effective tax rate for various incomes, then evaluate the fairness and implications of each approach.

Key Definitions:

Progressive Tax System: A tax system where the tax rate increases as the taxable income increases.

Regressive Tax System: A tax system where the tax rate decreases as the taxable income increases.

Flat Tax System: A tax system where everyone pays the same percentage of their income, regardless of how much they earn.

Effective Tax Rate: The percentage of income actually paid in taxes after all calculations ($\text{total tax} \div \text{total income}$).

Tax System 1: Progressive Federal Income Tax

Current U.S. Federal Income Tax Brackets (Simplified)

This system uses graduated tax brackets where different portions of income are taxed at increasing rates:

- Income up to \$10,275: 10% tax rate
- Income from \$10,276 to \$41,775: 12% tax rate
- Income from \$41,776 to \$89,075: 22% tax rate
- Income from \$89,076 to \$170,050: 24% tax rate
- Income from \$170,051 to \$215,950: 32% tax rate
- Income over \$215,951: 35% tax rate

Remember: Each tax rate applies only to the income within that bracket.

Tax Calculations

Annual Income	Tax Amount (\$)	Effective Tax Rate (%)
\$30,000	<input type="text"/>	<input type="text"/>
\$75,000	<input type="text"/>	<input type="text"/>
\$150,000	<input type="text"/>	<input type="text"/>
\$250,000	<input type="text"/>	<input type="text"/>

Analysis Questions

1. How does the effective tax rate change as income increases?

2. Who benefits most from this tax system? Who carries the heaviest burden?

3. What might be the social or economic implications of this tax structure?

Tax System 2: Flat Tax Rate

Flat Rate: 15% of All Income

This system applies the same tax rate (15%) to all income, regardless of how much someone earns.

Tax Calculations

Annual Income	Tax Amount (\$)	Effective Tax Rate (%)
\$30,000	<input type="text"/>	<input type="text"/>
\$75,000	<input type="text"/>	<input type="text"/>
\$150,000	<input type="text"/>	<input type="text"/>
\$250,000	<input type="text"/>	<input type="text"/>

Analysis Questions

1. How do the effective tax rates compare across different income levels?

2. Is this system progressive, regressive, or neither? Explain your reasoning.

3. What might be some advantages and disadvantages of this tax system?

Tax System 3: Sales Tax

State Sales Tax: 8% on All Purchases

This system taxes consumption rather than income. We'll analyze it based on spending patterns at different income levels, assuming people spend different percentages of their income.

- Low income (\$30,000): Spends 90% of income on taxable items
- Moderate income (\$75,000): Spends 70% of income on taxable items
- High income (\$150,000): Spends 50% of income on taxable items
- Very high income (\$250,000): Spends 30% of income on taxable items

Tax Calculations

Annual Income	Taxable Spending (\$)	Tax Amount (\$)	Effective Tax Rate (%)
\$30,000	\$27,000	<input type="text"/>	<input type="text"/>
\$75,000	\$52,500	<input type="text"/>	<input type="text"/>
\$150,000	\$75,000	<input type="text"/>	<input type="text"/>
\$250,000	\$75,000	<input type="text"/>	<input type="text"/>

Analysis Questions

1. Is sales tax progressive, regressive, or neutral? Explain why based on your calculations.

2. Which income groups are most affected by this type of tax?

3. Why do you think many states rely heavily on sales tax for revenue?

Comparative Analysis

Now that you've analyzed all three systems, compare them and consider their broader implications.

1. Rank the three tax systems from most progressive to most regressive, and explain your reasoning.

2. Which tax system do you think is most fair? Why?

3. If you were designing a tax system, which elements would you include, and why?

4. How might tax policy influence people's financial decisions (such as where to live, how much to work, or how to spend their money)?

