## Comparing Graduated and Flat Income Tax Systems

## EXAMPLE 5 Comparing Possible Systems

The total personal income in the United States is estimated to be about $\$ 13$ trillion. The federal income tax revenue is about $\$ 1$ trillion, and there are about 150 million taxpayers.
a. What percent of the total personal income is paid to federal income tax?

Discuss the following options for raising this amount of income tax revenue.
b. Assessment: Every taxpayer pays the same amount.
c. Flat tax on total income: Every taxpayer pays the same rate.
d. Graduated tax on taxable income: Continue the current U.S. system.
e. Graduated tax on total income: Eliminate deductions and loopholes.

## SOLUTION

a. The total federal income tax revenue is

$$
\begin{aligned}
\frac{1,000,000,000,000}{13,000,000,000,000} & \approx 0.0769 \\
& =7.69 \%
\end{aligned}
$$

of the total personal income in the United States.
b. For each taxpayer to pay the same amount, the amount would have to be

$$
\frac{1,000,000,000,000}{150,000,000} \approx \$ 6667 .
$$

This is not feasible. People with low incomes cannot pay this amount without extreme hardship.
c. The rate necessary to raise the revenue is the rate found in part (a). If every taxpayer pays $7.69 \%$ of his or her total income, the federal government will raise $\$ 1$ trillion in income tax.
d. The current graduated income tax system has been developing since 1913. It contains thousands of pages of tax code. With the many deductions and exemptions, a significant amount of income in the United States goes untaxed.
Warren Buffett is an American investor and industrialist. He is consistently ranked among the world's wealthiest people. Buffett is an outspoken critic of the American income tax system.
e. This is not a description of the current income tax code in the United States. Taxpayers can subtract deductions from their total income to reduce their tax liability. There are many deductions, such as some types of medical expenses, certain types of interest payments, contributions to charities, and deductions for dependents. If these deductions are removed, it will no longer be possible for one of the wealthiest Americans, Warren Buffett, to claim that he pays only $17.7 \%$ tax on an annual income of approximately $\$ 46$ million.

## Checkpoint

Help at Math.andYOU.com
Write a detailed description of an income tax system that you think would be fair to all citizens in the United States.

