

# Worksheet Solutions

## Comparing Regressive, Progressive, and Proportional Taxes

### Theme 3: Fairness in Taxes Lesson 5: How Taxes Affect Us

#### Key Terms

**progressive tax**—A tax that takes a larger percentage of income from high-income groups than from low-income groups.

**proportional tax**—A tax that takes the same percentage of income from all income groups.

**regressive tax**—A tax that takes a larger percentage of income from low-income groups than from high-income groups.

**vertical equity**—The concept that people in different income groups should pay different rates of taxes or different percentages of their incomes as taxes. “Unequals should be taxed unequally.”

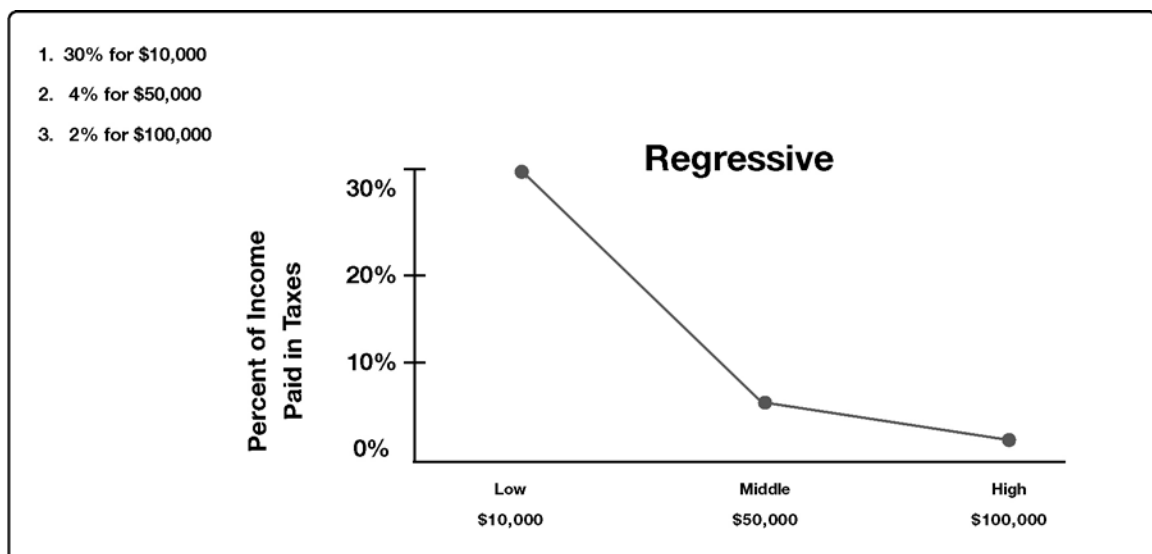
#### Summary

In the United States there are **progressive** income taxes and **regressive** Social Security and property taxes. Excise taxes and user fees are somewhat regressive. This combination results in taxpayers paying roughly the same percentage of their incomes in taxes, creating a **proportional** system. **Vertical equity** is the concept that people in different income groups should pay different rates of taxes.

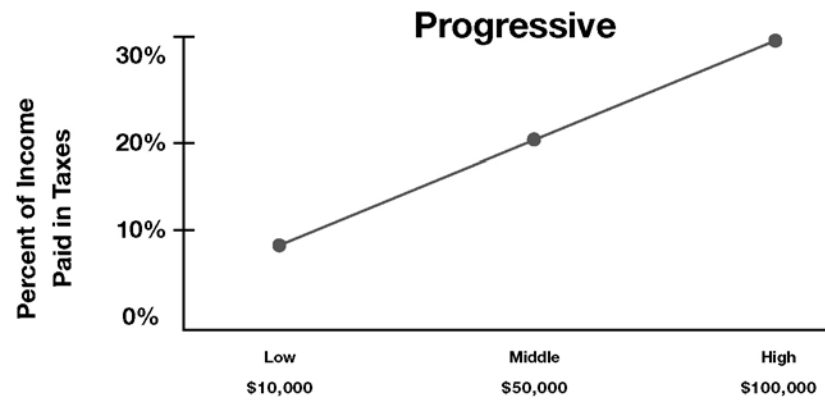
#### Activity 1

Complete the line graphs to compare how a regressive tax, a progressive tax, and a proportional tax affect different income groups.

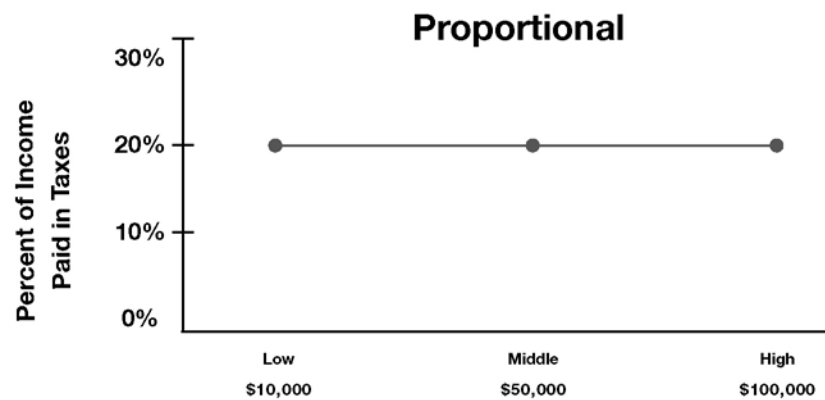
1. Plot the curve on the graphs by joining the dots.



1. 10% for \$10,000
2. 20% for \$50,000
3. 30% for \$100,000



1. 20% for \$10,000
2. 20% for \$50,000
3. 20% for \$100,000



2. According to the tables below, what amount of tax would people in each tax system pay?

Write the amounts over each dot on the line graphs.

REGRESSIVE TAX			
	Income	Percentage of Income Paid in Tax	Amount of Tax
Family A	\$10,000	20%	\$2,000
Family B	\$50,000	4%	\$2,000
Family C	\$100,000	2%	\$2,000

PROGRESSIVE TAX			
	Income	Percentage of Income Paid in Tax	Amount of Tax
Family A	\$10,000	10%	\$1,000
Family B	\$50,000	20%	\$10,000
Family C	\$100,000	30%	\$30,000

PROPORTIONAL TAX			
	Income	Percentage of Income Paid in Tax	Amount of Tax
Family A	\$10,000	20%	\$2,000
Family B	\$50,000	20%	\$10,000
Family C	\$100,000	20%	\$20,000

## Activity 2



1. Is the state gasoline tax regressive, progressive, or proportional? Why?

**Regressive; it takes a higher percentage of lower incomes (1.0%) than of higher incomes (.5%). It can also be considered proportional since everyone is taxed at the same rate.**

2. Do you think that excise taxes on such consumer products as automobile tires, jewelry, cosmetics, and travel would be regressive, progressive, or proportional? Why?

**Regressive; it is likely that lower-income groups would spend a larger proportion of their income on the taxed items than would higher-income groups. Excise taxes can also be considered proportional since everyone is taxed at the same rate.**

3. Do you think that high excise taxes on items such as tobacco or alcohol should be used to discourage people from consuming those items?

**Answers will vary but should be supported by examples or explanations.**

### Activity 3

Read the passage below and answer the following questions.

The FICA tax is levied on employers, employees, and certain self-employed individuals. Revenue goes to Social Security and Medicare. In 2013, the employee's contribution to the retirement part of the FICA tax was 6.2 percent of the first \$113,700 earned in wages and salaries. (Medicare is withheld on all wages and tips.) People with income from interest and dividend payments do not have to pay any Social Security tax on this income.

1. Over the wage and salary income range of \$0 to \$113,700, was the Social Security tax regressive, progressive, or proportional? Why?

**Proportional; the same percentage (6.2%) was taken of all earned income over the given range.**

2. For employees who earned more than \$113,700, was the Social Security tax regressive, progressive, or proportional? Why?

**Regressive; they paid no social security tax on earned income over \$113,700, so their average tax rate would be lower than the rate for people who earned \$113,700 or less. However, they did pay income tax on these earnings, so their total liability for all taxes may have been proportional or even progressive.**

3. For people with income from interest and dividend payments, is the Social Security tax regressive, progressive, or proportional? Why?

**Regressive; they pay no Social Security tax on the interest and dividend part of their income, so their average tax rate would be lower than the rate for people who do not receive any interest or dividend income. They do owe income tax on most of this income, so their total tax liability may be proportional or even progressive.**

4. Some people worry that Social Security will not have enough funds to cover retirees in the future. Do you think the FICA tax rate or the taxable limit should be raised to cover any possible shortfalls? Explain your answer.

**Answers will vary but should be supported by examples or explanations.**