

## Chapter 02 Policy Standards for a Good Tax

### True / False Questions

1. A tax meets the standard of sufficiency if it is easy for people to pay the tax.  
True   False
  
2. The federal government is not required to pay interest on the national debt.  
True   False
  
3. A static forecast of the revenue effect of a tax rate change assumes that the tax base does not change.  
True   False
  
4. A dynamic forecast of the revenue effect of a tax rate change assumes that the tax base does not change.  
True   False
  
5. The federal Social Security tax burden on employees has not increased since 1990 because the tax rate has not increased since that year.  
True   False
  
6. If State H increases its sales tax rate by 1%, its sales tax revenue must also increase by 1%.  
True   False

7. The city of Berne recently enacted a 10% tax on the price of a subway ticket. Consequently, Mrs. Lane now walks to work instead of taking the subway. Her behavior illustrates the substitution effect of a tax increase.

True False

8. Jurisdiction P recently increased its income tax rate. A taxpayer who reacts to the increase by working harder to earn more income is demonstrating the income effect of the rate increase.

True False

9. According to supply-side economic theory, a decrease in tax rates for high-income individuals could actually cause an increase in tax revenue.

True False

10. Supply-side economic theory holds that people who benefit from a tax rate reduction will spend their tax windfall on consumption goods.

True False

11. State use taxes are more convenient for individual consumers than state sales taxes.

True False

12. The Internal Revenue Service's cost of collecting \$100 of tax revenue is about \$3.

True False

13. A convenient tax has low compliance costs for taxpayers and low collection and enforcement costs for the government.

True False

14. According to the classical concept of efficiency, an efficient tax should be neutral in its effect on free market allocations of economic resources.

True False

15. According to the Keynesian concept of efficiency, an efficient tax should be neutral in its effect on free market allocations of economic resources.

True False

16. A tax meets the standard of efficiency if it generates enough revenue to pay for the public goods and services provided by the government.

True False

17. A provision in the tax law designed to encourage a specific economic behavior is a tax preference.

True False

18. A good tax should result in either horizontal or vertical equity across taxpayers.

True False

19. Changes in the tax law intended to make the measurement of taxable income more precise usually make the tax law less complex.

True False

20. Vertical equity focuses on measurement of the tax base, and horizontal equity focuses on the tax rate structure.

True False

21. Tax systems with regressive rate structures result in a proportionally heavier tax burden on persons with smaller tax bases.

True False

22. A progressive rate structure and a proportionate rate structure both result in vertical equity across taxpayers.

True False

23. The U.S. individual income tax has always used a progressive rate structure.

True False

24. The declining marginal utility of income across individuals can be measured empirically.

True False

25. Tax liability divided by taxable income equals marginal tax rate.

True False

26. If a tax has a proportionate rate structure, a taxpayer's marginal rate and average rate are equal.

True False

27. If a tax has a progressive rate structure, a taxpayer's average rate is greater than her marginal rate.

True False

28. The theory of distributional justice is a rationale for a progressive income tax system.

True False

29. Individuals who believe that a tax system is fair are less likely to cheat on their taxes than individuals who believe that the system is unfair.

True False

30. Many taxpayers believe the income tax system is unfair because it is so complicated.

True False

**Multiple Choice Questions**

31. Government officials of Country Z estimate that next year's public programs will cost \$19 million but that tax revenues will be only \$15 million. The officials could avoid a deficit next year by adopting which of the following fiscal strategies?

- A. Reduce the cost of public programs by \$4 million.
- B. Increase taxes by \$4 million.
- C. Borrow \$4 million by issuing new government bonds.
- D. All of these strategies will avoid a deficit.

32. Government officials of Country Z estimate that next year's public programs will cost \$19 million but that tax revenues will be only \$15 million. Which of the following statements is **false**?

- A. Country Z's tax system is sufficient.
- B. Country Z's government is engaging in deficit spending.
- C. If Country Z must borrow \$4 million to pay for its public programs, its national debt will increase by \$4 million.
- D. Country Z's government could balance its budget by eliminating a program that costs \$4 million.

33. Government J decides that it must increase its tax revenue. Which of the strategies should result in more revenue?

- A. Increase the rate of an existing tax.
- B. Expand the base of an existing tax.
- C. Enact a tax on a new base.
- D. All of these strategies should result in more revenue for Government J.

34. The government of Nation C operated at a \$32 billion deficit this year. The deficit suggests that Nation C's tax system is:

- A. Inefficient
- B. Insufficient
- C. Unfair
- D. Inconvenient

35. The city of Belleview operated at an \$865,000 surplus this year. The surplus suggests that the municipal tax system is:

- A. Fair
- B. Efficient
- C. Sufficient
- D. Convenient

36. Which of the following statements concerning the federal Social Security tax is **true**?

- A. The tax burden increases annually because the rate increases annually.
- B. The tax burden increases annually because the base increases annually.
- C. Both the rate and the base increase annually.
- D. The Social Security tax burden has not increased since 1990.

37. A static forecast of the incremental revenue from a tax rate increase presumes that:

- A. The tax base will not change because of the rate increase.
- B. The tax base will increase by the same proportion as the rate increase.
- C. The tax base will decrease by the same proportion as the rate increase.
- D. The tax rate and the tax base are correlated.

38. A dynamic forecast of the incremental revenue from a tax rate increase presumes that:

- A. Taxpayers will not change their behavior because of the rate increase.
- B. The tax base will increase by the same proportion as the rate increase.
- C. The tax base will decrease by the same proportion as the rate increase.
- D. The tax rate and the tax base are correlated.

39. Jurisdiction F levies a 10% excise tax on the purchase of golf carts. The annual revenue from this tax averages \$800,000 (10% \* \$8 million average annual golf cart purchases). Jurisdiction F is considering raising the tax rate to 12%. Which of the following statements is **true**?

- A. The rate increase will increase revenue by \$160,000.
- B. Based on a dynamic forecast, the rate increase will increase revenue by \$160,000.
- C. Based on a static forecast, the rate increase will increase revenue by \$160,000.
- D. None of the above is true.

40. Last year, Government G levied a 35% tax on individual income, and Mr. Slate paid \$35,000 tax on his \$100,000 income. This year, the government increased the tax rate to 40%. Which of the following statements is **false**?

- A. Based on a static forecast, government G should collect \$5,000 additional tax from Mr. Slate this year.
- B. If Mr. Slate took a second job to maintain his after-tax disposable income, his behavior illustrates a substitution effect of the rate increase.
- C. If Mr. Slate took a second job to maintain his after-tax disposable income, government G should collect more than \$5,000 additional tax from him this year.
- D. If Mr. Slate sold an income-generating investment and used the money for personal consumption, his behavior illustrates a substitution effect of the rate increase.

41. Which of the following statements about the substitution effect of an income tax rate increase is **false**?

- A. The substitution effect is theoretically stronger for high-income taxpayers than for low-income taxpayers.
- B. The substitution effect is theoretically stronger for a family's secondary wage earner than for the family's primary wage earner.
- C. The substitution effect is theoretically stronger for self-employed individuals who control their own time than for employees whose work schedules are controlled by their employers.
- D. None of the above is false.

42. Which of the following statements about the income effect of an income tax rate increase is **true**?

- A. The income effect is theoretically stronger for low-income taxpayers than for high-income taxpayers.
- B. The income effect is theoretically stronger for a family's secondary wage earner than for the family's primary wage earner.
- C. The income effect motivates individuals to find ways to increase their before-tax income.
- D. Both A. and C. are true.

43. Which of the following statements about the income and substitution effects of an income tax rate increase is **true**?

- A. The income and substitution effects are contradictory behavioral reactions.
- B. From the government's perspective, the substitution effect is more desirable than the income effect.
- C. Faith in the income effect is the foundation for supply-side economic theory.
- D. Dynamic forecasts of incremental tax revenues must consider the potential income effect but not the potential substitution effect of a rate increase.

44. Supply-side economic theory

- A. Predicts that a decrease in the highest income tax rates will cause an increase in government revenues.
- B. Is inconsistent with the substitution effect.
- C. Was a clear failure following the Reagan administration tax cuts of the 1980s.
- D. Predicts that taxpayers will save their tax windfall from a rate cut rather than spend or investment the windfall.



45. Which of the following describes a tax that meets the standard of convenience?
- A. A tax that the government can administer without excessive cost.
  - B. A tax that is easy for taxpayers to compute and pay.
  - C. A tax that minimizes the opportunity for noncompliance.
  - D. All of the above describe a convenient tax.
46. Which of the following taxes is most convenient for individuals to pay?
- A. Sales tax
  - B. Use tax
  - C. Federal income tax
  - D. Real property tax
47. Which of the following statements regarding a convenient tax is **false**?
- A. From the government's viewpoint, a good tax should be convenient to administer.
  - B. From the taxpayer's viewpoint, a good tax should be convenient to pay.
  - C. A convenient tax should have a method of collection that offers maximum opportunity for noncompliance.
  - D. A convenient tax should permit taxpayers to compute their tax with reasonable certainty without incurring undue costs.
48. Which of the following statements does not describe the classical standard of tax efficiency?
- A. An efficient tax is a neutral factor in a free market economy.
  - B. An efficient tax does not change taxpayer behavior.
  - C. An efficient tax encourages full employment.
  - D. An efficient tax favors a laissez-faire economy policy.
49. The statement that "an old tax is a good tax" means that:
- A. Changes in the tax law create uncertainty in the business environment.
  - B. Changes in the tax law disrupt traditional planning strategies.
  - C. Changes in the tax law increase the compliance burden on businesses.
  - D. All of the above.

50. The city of Hartwell spends about \$3 million annually on snow removal. The city is considering amending its real property tax law to allow homeowners to offset the cost of private snow removal against their annual property tax liability. This amendment would affect the:

- A. Fairness of the tax
- B. Efficiency of the tax
- C. Sufficiency of the tax
- D. Convenience of the tax

51. Which of the following statements does not describe the Keynesian standard of tax efficiency?

- A. An efficient tax encourages economic growth.
- B. An efficient tax encourages full employment.
- C. An efficient tax encourages price-level stability.
- D. All of the above describe the Keynesian standard of tax efficiency.

52. Government L levies a 4% excise tax on restaurant meals. It is considering reducing the rate to 2% on meals served in restaurants that ban cigarette and cigar smoking and to increase the rate to 5% in restaurants that allow smoking. Which of the following statements is **true**?

- A. The rate change would improve the neutrality of the excise tax.
- B. The rate change would improve the convenience of the tax.
- C. The rate change is intended to affect social behavior.
- D. Both the rate change would improve the convenience of the tax. and the rate change is intended to affect social behavior are true.

53. The state of California plans to amend its personal income tax laws to allow parents to reduce their tax by the cost of infant car seats. Which of the following statements is **true**?

- A. The amendment creates a tax preference for parents who purchase infant car seats.
- B. The amendment is intended to change social behavior.
- C. The amendment increases the neutrality of the tax law.
- D. Both the amendment creates a tax preference for parents who purchase infant car seats and is also intended to change social behavior are true.

54. Which of the following statements concerning tax preferences is **false**?

- A. Tax preferences increase the complexity of the law.
- B. Tax preferences raise additional revenue for the government.
- C. Tax preferences are government subsidies for targeted taxpayer activities.
- D. Tax preferences do not improve the accurate measurement of the tax base.

55. Which of the following statements concerning tax preferences is **true**?

- A. The annual revenue loss from federal tax preferences is quantified in the Tax Expenditures Budget.
- B. Tax preferences increase the fairness of the tax law.
- C. Tax preferences simplify the tax law.
- D. Tax preferences make the tax law more neutral across taxpayers.

56. Which of the following statements about horizontal equity is **false**?

- A. Horizontal equity focuses on a rational and impartial measurement of the tax base.
- B. Horizontal equity focuses on the measurement of taxpayers' ability to pay.
- C. If persons with equal ability to pay a tax owe an equal amount of tax, the tax is horizontally equitable.
- D. None of the above is false.

57. The federal income tax law allows individuals whose property is destroyed by a natural disaster such as a fire or hurricane to reduce their taxable income by the amount of their financial loss. This rule is intended to improve the:

- A. Convenience of the tax
- B. Efficiency of the tax
- C. Horizontal equity of the tax
- D. Vertical equity of the tax

58. The sales tax laws of many states exempt the purchase of groceries and prescription drugs from tax. Such exemptions are intended to improve the:

- A. Convenience of the tax
- B. Equity of the tax
- C. Sufficiency of the tax
- D. Neutrality of the tax

59. Which of the following statements about vertical equity is **false**?

- A. Vertical equity focuses on a fair rate structure instead of a fair measurement of the tax base.
- B. If persons with greater ability to pay owe more tax than persons with lesser ability to pay, the tax is vertically equitable.
- C. A tax with a single percentage rate is not vertically equitable.
- D. None of the above is false.

60. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Which of the following statements is **true**?

- A. The schedule provides no information as to whether Jurisdiction M's tax is horizontally equitable.
- B. Jurisdiction M's tax is vertically equitable.
- C. Jurisdiction M's tax is vertically equitable only for individuals with \$50,000 or less taxable income.
- D. Both A. and B. are true.

61. Which of the following statements about a regressive tax rate structure is **false**?
- A. A regressive rate structure cannot result in vertical equity.
  - B. Regressive rates decrease as the tax base increases.
  - C. A regressive rate structure places a proportionally heavier tax burden on taxpayers with smaller tax bases than persons with greater tax bases.
  - D. None of the above is false.

62. Vervet County levies a real property tax based on the following schedule.

<i>Rate</i>	<i>Assessed value</i>
3%	\$-0- to \$250,000
+ 1%	\$250,001 and above

Which type of rate structure does this tax use?

- A. Proportionate
- B. Regressive
- C. Progressive
- D. Dual-bracket

63. Vervet County levies a real property tax based on the following schedule.

<i>Rate</i>	<i>Assessed value</i>
3%	\$-0- to \$250,000
+ 1%	\$250,001 and above

Bilex Inc. owns real property valued at \$629,800. Compute Bilex's tax on this property.

- A. \$13,798
- B. \$7,500
- C. \$6,298
- D. None of the above.

64. Vervet County levies a real property tax based on the following schedule.

<i>Rate</i>	<i>Assessed value</i>
3%	\$-0- to \$250,000
+ 1%	\$250,001 and above

Which of the following statements is **false**?

- A. If Mr. Clem owns real property valued at \$112,500, his average tax rate is 3%.
- B. If Ms. Barker owns real property valued at \$455,650, her average tax rate is 2.1%.
- C. If Ms. Lumley owns real property valued at \$750,000, her marginal tax rate is 1%.
- D. None of the above is false.

65. Which of the following statements about tax rate structures is **true**?

- A. Regressive rate structures are illegal in the United States.
- B. A tax with a graduated rate structure must be either regressive or progressive.
- C. A proportionate rate structure is the only structure resulting in vertical equity.
- D. None of the above is true.

66. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Which type of rate structure does this tax use?

- A. Proportionate
- B. Regressive
- C. Progressive
- D. Multi-bracket

67. Which of the following statements about a progressive tax rate structure is **false**?

- A. Progressive rates increase as the tax base increases.
- B. Progressive rates reflect the theory of the declining marginal utility of income.
- C. The federal income tax has always used a progressive rate structure.
- D. Progressive rates result in greater vertical equity than a proportionate rate.

68. Which of the following statements about a proportionate income tax rate structure is **false**?

- A. A theoretic justification for a proportionate rate is its superior potential for wealth redistribution.
- B. Under a proportionate rate structure, the marginal rate equals the average rate.
- C. Under a proportionate rate structure, the taxpayer with the least income pays the same percentage of income to the government as the taxpayer with the most income.
- D. None of the above is false.

69. Which of the following statements concerning income tax rate structures is **false**?

- A. Under a progressive rate structure, the marginal rate and the average rate are equal.
- B. Under a regressive rate structure, the average rate for low-income individuals is more than the average rate for high-income individuals.
- C. Under either a regressive, proportionate, or progressive rate structure, high-income taxpayers pay more dollars of tax than low-income individuals.
- D. In theory, a progressive rate structure results in equal economic sacrifice across taxpayers.

70. Which of the following statements concerning a regressive tax rate structure is **true**?

- A. A regressive tax rate structure is justified by the tax policy of distributive justice.
- B. A regressive rate structure is justified by the theory of the declining marginal utility of income.
- C. Under a regressive rate structure, the average tax rate for high-income taxpayers is less than the marginal tax rate.
- D. None of the above statements is true.



71. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Mr. Coen has \$78,000 taxable income. Compute the tax on this income.

- A. \$4,740
- B. \$6,240
- C. \$8,740
- D. None of the above

72. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Ms. Owen has \$314,000 taxable income. Compute the tax on this income.

- A. \$29,680
- B. \$28,180
- C. \$37,680
- D. None of the above

73. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Which of the following statements is **true**?

- A. If Mrs. Hall's taxable income is \$227,000, her average tax rate is 12%.
- B. If Mr. Poe's taxable income is \$41,200, his marginal tax rate is 8%.
- C. If Ms. Kaye's taxable income is \$63,800, her marginal tax rate is 8%.
- D. None of the above is true.

74. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Which of the following statements is **false**?

- A. If Ms. Lui's taxable income is \$33,400, her average tax rate is 5%.
- B. If Mr. Bell's taxable income is \$519,900, his marginal tax rate is 12%.
- C. If Ms. Vern's taxable income is \$188,000, her average tax rate is 7.2%.
- D. None of the above is false.

75. Congress originally enacted the federal estate and gift taxes to improve:

- A. Distributional justice
- B. Economic efficiency
- C. Vertical equity
- D. Horizontal equity

76. Which of the following tax policies would increase the redistribution of wealth across society?

- A. Repealing the federal estate and gift taxes
- B. Increasing the highest marginal income tax rate by 10%
- C. Replacing the progressive income tax rate structure with a flat rate
- D. Replacing the income tax with a national sales tax

77. Which of the following statements concerning the standard of fairness is **false**?

- A. People who believe that a tax is unfair are more likely to evade the tax.
- B. People believe that the federal income tax is unfair because it contains preferences available only to wealthy individuals.
- C. The public perception that the federal income tax is unfair has decreased in recent decades.
- D. None of the above is false.

78. Congress plans to amend the federal income tax to provide a deduction for the first \$2,400 of residential rent paid by families with incomes below the federal poverty level. Which of the following statements is **true**?

- A. The amendment is intended to improve the efficiency of the tax.
- B. The amendment is intended to improve the equity of the tax.
- C. The amendment is intended to improve the simplicity of the tax.
- D. The amendment is intended to improve the convenience of the tax.

79. Congress plans to amend the federal individual income tax to eliminate the deductions for medical care, educational savings, charitable contributions, and home mortgage interest. Which of the following statements is **true**?

- A. The amendment will reduce the complexity of the tax.
- B. The amendment will increase the horizontal equity of the tax.
- C. The amendment will increase the neutrality of the tax.
- D. Both the amendment will reduce the complexity of the tax and will increase the neutrality of the tax.

80. Congress plans to amend the federal income tax to provide a deduction for the cost of energy-efficient fluorescent light bulbs. Which of the following statements is **true**?

- A. The amendment is intended to improve the efficiency of the tax.
- B. The amendment is intended to improve the equity of the tax.
- C. The amendment is intended to improve the simplicity of the tax.
- D. The amendment is intended to improve the convenience of the tax.

81. Congress recently amended the tax law to make it easier for individuals to file their income tax returns electronically (online). Which of the following statements is **true**?

- A. The amendment is intended to improve the efficiency of the tax.
- B. The amendment is intended to improve the equity of the tax.
- C. The amendment is intended to improve the simplicity of the tax.
- D. The amendment is intended to improve the convenience of the tax.

#### Application Problems

82. Mr. and Mrs. Boln earn \$63,000 annual income and pay 20% in state and federal income tax. If tax rates increase so that the couple's annual rate increases to 25%, how much additional income must they earn to maintain their after-tax standard of living?

83. Mr. Ohno owns and operates a part-time service business that generates \$80,000 annual taxable income. His federal tax rate on this income is 17%. Because of recent legislation, this rate will increase to 25% next year.

A. Based on a static forecast, how much additional revenue will the federal government collect from Mr. Ohno next year?

B. How much additional revenue will the federal government collect if Mr. Ohno decides to work fewer hours and consequently earns only \$50,000 next year?

84. The City of Willford levies a flat 7% tax on individual income in excess of \$55,000. Individuals who earn \$55,000 or less pay no income tax.

A. Ms. Vello earned \$127,200 income this year. Compute her city income tax and determine her average tax rate.

B. Mr. Sui earned \$68,900 income this year. Compute his city income tax and determine his average tax rate.

C. Does Willford have a proportionate, progressive, or regressive tax rate structure?

85. The country of Valhalla levies an income tax with the following rate structure.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 10%	\$50,001 to \$150,000
+ 20%	\$150,001 and above

- A. Mrs. Greene's annual income is \$125,000. Compute her tax, her average tax rate, and her marginal tax rate.
- B. Mr. Chen's annual income is \$220,000. Compute his tax, his average tax rate, and his marginal tax rate.
- C. Does Valhalla have a proportionate, progressive, or regressive tax rate structure?

## Chapter 02 Policy Standards for a Good Tax **Answer Key**

### **True / False Questions**

1. A tax meets the standard of sufficiency if it is easy for people to pay the tax.

**FALSE**

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

2. The federal government is not required to pay interest on the national debt.

**FALSE**

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

3. A static forecast of the revenue effect of a tax rate change assumes that the tax base does not change.

**TRUE**

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

4. A dynamic forecast of the revenue effect of a tax rate change assumes that the tax base does not change.

**FALSE**

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

5. The federal Social Security tax burden on employees has not increased since 1990 because the tax rate has not increased since that year.

**FALSE**

The Social Security tax burden increases annually because the tax base increases annually.

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

6. If State H increases its sales tax rate by 1%, its sales tax revenue must also increase by 1%.

**FALSE**

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

7. The city of Berne recently enacted a 10% tax on the price of a subway ticket. Consequently, Mrs. Lane now walks to work instead of taking the subway. Her behavior illustrates the substitution effect of a tax increase.

**TRUE**

Mrs. Lane substituted a nontaxable activity for a taxable activity.

*Difficulty: 3 Hard*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

8. Jurisdiction P recently increased its income tax rate. A taxpayer who reacts to the increase by working harder to earn more income is demonstrating the income effect of the rate increase.

**TRUE**

*Difficulty: 1 Easy*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*



9. According to supply-side economic theory, a decrease in tax rates for high-income individuals could actually cause an increase in tax revenue.

**TRUE**

*Difficulty: 1 Easy*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

10. Supply-side economic theory holds that people who benefit from a tax rate reduction will spend their tax windfall on consumption goods.

**FALSE**

Supply-side economic theory predicts that people who benefit from a tax rate reduction will invest their tax windfall in new economic ventures.

*Difficulty: 3 Hard*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

11. State use taxes are more convenient for individual consumers than state sales taxes.

**FALSE**

State sales taxes are more convenient because they are collected by the seller. Consumers must pay use taxes directly.

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Describe the characteristics of a convenient tax.*

12. The Internal Revenue Service's cost of collecting \$100 of tax revenue is about \$3.

**FALSE**

The IRS's cost of collecting \$100 of tax revenue averages less than 50 cents.

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Describe the characteristics of a convenient tax.*

13. A convenient tax has low compliance costs for taxpayers and low collection and enforcement costs for the government.

**TRUE**

*Difficulty: 1 Easy*

*Learning Objective: 02-03 Describe the characteristics of a convenient tax.*

14. According to the classical concept of efficiency, an efficient tax should be neutral in its effect on free market allocations of economic resources.

**TRUE**

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

15. According to the Keynesian concept of efficiency, an efficient tax should be neutral in its effect on free market allocations of economic resources.

**FALSE**

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

16. A tax meets the standard of efficiency if it generates enough revenue to pay for the public goods and services provided by the government.

**FALSE**

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

17. A provision in the tax law designed to encourage a specific economic behavior is a tax preference.

**TRUE**

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

18. A good tax should result in either horizontal or vertical equity across taxpayers.

**FALSE**

A good tax should result in both horizontal and vertical equity.

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

19. Changes in the tax law intended to make the measurement of taxable income more precise usually make the tax law less complex.

**FALSE**

Increased precision in the measurement of taxable income usually increases tax law complexity.

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

20. Vertical equity focuses on measurement of the tax base, and horizontal equity focuses on the tax rate structure.

**FALSE**

Just the opposite!

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

21. Tax systems with regressive rate structures result in a proportionally heavier tax burden on persons with smaller tax bases.

**TRUE**

*Difficulty: 1 Easy*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

22. A progressive rate structure and a proportionate rate structure both result in vertical equity across taxpayers.

**TRUE**

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

23. The U.S. individual income tax has always used a progressive rate structure.

**TRUE**

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

24. The declining marginal utility of income across individuals can be measured empirically.

**FALSE**

*Difficulty: 3 Hard*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

25. Tax liability divided by taxable income equals marginal tax rate.

**FALSE**

*Difficulty: 1 Easy*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*

26. If a tax has a proportionate rate structure, a taxpayer's marginal rate and average rate are equal.

**TRUE**

*Difficulty: 2 Medium*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*

27. If a tax has a progressive rate structure, a taxpayer's average rate is greater than her marginal rate.

**FALSE**

With a progressive rate structure, marginal rate is always greater or equal to average rate.

*Difficulty: 2 Medium*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*

28. The theory of distributional justice is a rationale for a progressive income tax system.

**TRUE**

*Difficulty: 2 Medium*

*Learning Objective: 02-08 Discuss distributive justice as a tax policy objective.*

29. Individuals who believe that a tax system is fair are less likely to cheat on their taxes than individuals who believe that the system is unfair.

**TRUE**

*Difficulty: 1 Easy*

*Learning Objective: 02-08 Discuss distributive justice as a tax policy objective.*

30. Many taxpayers believe the income tax system is unfair because it is so complicated.

**TRUE**

*Difficulty: 1 Easy*

*Learning Objective: 02-08 Discuss distributive justice as a tax policy objective.*

**Multiple Choice Questions**

31. Government officials of Country Z estimate that next year's public programs will cost \$19 million but that tax revenues will be only \$15 million. The officials could avoid a deficit next year by adopting which of the following fiscal strategies?

- A. Reduce the cost of public programs by \$4 million.
- B. Increase taxes by \$4 million.
- C. Borrow \$4 million by issuing new government bonds.
- D. All of these strategies will avoid a deficit.**

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

32. Government officials of Country Z estimate that next year's public programs will cost \$19 million but that tax revenues will be only \$15 million. Which of the following statements is **false**?

- A. Country Z's tax system is sufficient.**
- B. Country Z's government is engaging in deficit spending.
- C. If Country Z must borrow \$4 million to pay for its public programs, its national debt will increase by \$4 million.
- D. Country Z's government could balance its budget by eliminating a program that costs \$4 million.

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

33. Government J decides that it must increase its tax revenue. Which of the strategies should result in more revenue?

- A. Increase the rate of an existing tax.
- B. Expand the base of an existing tax.
- C. Enact a tax on a new base.
- D. All of these strategies should result in more revenue for Government J.**

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

34. The government of Nation C operated at a \$32 billion deficit this year. The deficit suggests that Nation C's tax system is:

- A. Inefficient
- B. Insufficient**
- C. Unfair
- D. Inconvenient

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

35. The city of Belleview operated at an \$865,000 surplus this year. The surplus suggests that the municipal tax system is:

- A. Fair
- B. Efficient
- C. Sufficient**
- D. Convenient

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

36. Which of the following statements concerning the federal Social Security tax is **true**?

- A. The tax burden increases annually because the rate increases annually.
- B. The tax burden increases annually because the base increases annually.**
- C. Both the rate and the base increase annually.
- D. The Social Security tax burden has not increased since 1990.

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

37. A static forecast of the incremental revenue from a tax rate increase presumes that:

- A. The tax base will not change because of the rate increase.
- B. The tax base will increase by the same proportion as the rate increase.
- C. The tax base will decrease by the same proportion as the rate increase.
- D. The tax rate and the tax base are correlated.

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

38. A dynamic forecast of the incremental revenue from a tax rate increase presumes that:

- A. Taxpayers will not change their behavior because of the rate increase.
- B. The tax base will increase by the same proportion as the rate increase.
- C. The tax base will decrease by the same proportion as the rate increase.
- D. The tax rate and the tax base are correlated.

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

39. Jurisdiction F levies a 10% excise tax on the purchase of golf carts. The annual revenue from this tax averages \$800,000 (10% \* \$8 million average annual golf cart purchases). Jurisdiction F is considering raising the tax rate to 12%. Which of the following statements is **true**?

- A. The rate increase will increase revenue by \$160,000.
- B. Based on a dynamic forecast, the rate increase will increase revenue by \$160,000.
- C. Based on a static forecast, the rate increase will increase revenue by \$160,000.
- D. None of the above is true.

A dynamic forecast would be based on a projected decrease in the average annual golf cart purchases because of the tax increase.

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*



40. Last year, Government G levied a 35% tax on individual income, and Mr. Slate paid \$35,000 tax on his \$100,000 income. This year, the government increased the tax rate to 40%. Which of the following statements is **false**?
- A. Based on a static forecast, government G should collect \$5,000 additional tax from Mr. Slate this year.
  - B.** If Mr. Slate took a second job to maintain his after-tax disposable income, his behavior illustrates a substitution effect of the rate increase.
  - C. If Mr. Slate took a second job to maintain his after-tax disposable income, government G should collect more than \$5,000 additional tax from him this year.
  - D. If Mr. Slate sold an income-generating investment and used the money for personal consumption, his behavior illustrates a substitution effect of the rate increase.

Mr. Slate's behavior in taking a second job illustrates an income effect.

*Difficulty: 3 Hard*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

41. Which of the following statements about the substitution effect of an income tax rate increase is **false**?
- A. The substitution effect is theoretically stronger for high-income taxpayers than for low-income taxpayers.
  - B. The substitution effect is theoretically stronger for a family's secondary wage earner than for the family's primary wage earner.
  - C. The substitution effect is theoretically stronger for self-employed individuals who control their own time than for employees whose work schedules are controlled by their employers.
  - D.** None of the above is false.

*Difficulty: 3 Hard*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

42. Which of the following statements about the income effect of an income tax rate increase is **true**?

- A. The income effect is theoretically stronger for low-income taxpayers than for high-income taxpayers.
- B. The income effect is theoretically stronger for a family's secondary wage earner than for the family's primary wage earner.
- C. The income effect motivates individuals to find ways to increase their before-tax income.
- D.** Both A. and C. are true.

The income effect is theoretically stronger for a family's primary wage earner.

*Difficulty: 3 Hard*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

43. Which of the following statements about the income and substitution effects of an income tax rate increase is **true**?

- A.** The income and substitution effects are contradictory behavioral reactions.
- B. From the government's perspective, the substitution effect is more desirable than the income effect.
- C. Faith in the income effect is the foundation for supply-side economic theory.
- D. Dynamic forecasts of incremental tax revenues must consider the potential income effect but not the potential substitution effect of a rate increase.

From the government's perspective, the income effect is more desirable because it creates a revenue windfall. Faith in the substitution effect is the foundation for supply-side economic theory. Dynamic revenue forecasts must consider both potential behavioral effects.

*Difficulty: 3 Hard*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

44. Supply-side economic theory

- A.** Predicts that a decrease in the highest income tax rates will cause an increase in government revenues.
- B. Is inconsistent with the substitution effect.
- C. Was a clear failure following the Reagan administration tax cuts of the 1980s.
- D. Predicts that taxpayers will save their tax windfall from a rate cut rather than spend or investment the windfall.

*Difficulty: 2 Medium*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

45. Which of the following describes a tax that meets the standard of convenience?

- A. A tax that the government can administer without excessive cost.
- B. A tax that is easy for taxpayers to compute and pay.
- C. A tax that minimizes the opportunity for noncompliance.
- D.** All of the above describe a convenient tax.

*Difficulty: 1 Easy*

*Learning Objective: 02-03 Describe the characteristics of a convenient tax.*

46. Which of the following taxes is most convenient for individuals to pay?

- A.** Sales tax
- B. Use tax
- C. Federal income tax
- D. Real property tax

The sales tax is collected by the seller and requires no effort on the part of the purchaser to pay the tax.

*Difficulty: 1 Easy*

*Learning Objective: 02-03 Describe the characteristics of a convenient tax.*

47. Which of the following statements regarding a convenient tax is **false**?

- A. From the government's viewpoint, a good tax should be convenient to administer.
- B. From the taxpayer's viewpoint, a good tax should be convenient to pay.
- C.** A convenient tax should have a method of collection that offers maximum opportunity for noncompliance.
- D. A convenient tax should permit taxpayers to compute their tax with reasonable certainty without incurring undue costs.

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Describe the characteristics of a convenient tax.*

48. Which of the following statements does not describe the classical standard of tax efficiency?

- A. An efficient tax is a neutral factor in a free market economy.
- B. An efficient tax does not change taxpayer behavior.
- C.** An efficient tax encourages full employment.
- D. An efficient tax favors a laissez-faire economy policy.

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

49. The statement that "an old tax is a good tax" means that:

- A. Changes in the tax law create uncertainty in the business environment.
- B. Changes in the tax law disrupt traditional planning strategies.
- C. Changes in the tax law increase the compliance burden on businesses.
- D.** All of the above.

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

50. The city of Hartwell spends about \$3 million annually on snow removal. The city is considering amending its real property tax law to allow homeowners to offset the cost of private snow removal against their annual property tax liability. This amendment would affect the:
- A. Fairness of the tax
  - B. Efficiency of the tax**
  - C. Sufficiency of the tax
  - D. Convenience of the tax

The amendment is intended to change taxpayer behavior by rewarding individuals who provide for their own snow removal.

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

51. Which of the following statements does not describe the Keynesian standard of tax efficiency?
- A. An efficient tax encourages economic growth.
  - B. An efficient tax encourages full employment.
  - C. An efficient tax encourages price-level stability.
  - D. All of the above describe the Keynesian standard of tax efficiency.**

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

52. Government L levies a 4% excise tax on restaurant meals. It is considering reducing the rate to 2% on meals served in restaurants that ban cigarette and cigar smoking and to increase the rate to 5% in restaurants that allow smoking. Which of the following statements is **true**?
- A. The rate change would improve the neutrality of the excise tax.
  - B. The rate change would improve the convenience of the tax.
  - C. The rate change is intended to affect social behavior.**
  - D. Both the rate change would improve the convenience of the tax, and the rate change is intended to affect social behavior are true.

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

53. The state of California plans to amend its personal income tax laws to allow parents to reduce their tax by the cost of infant car seats. Which of the following statements is **true**?

- A. The amendment creates a tax preference for parents who purchase infant car seats.
- B. The amendment is intended to change social behavior.
- C. The amendment increases the neutrality of the tax law.
- D.** Both the amendment creates a tax preference for parents who purchase infant car seats and is also intended to change social behavior are true.

The amendment decreases the neutrality of the tax law.

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

54. Which of the following statements concerning tax preferences is **false**?

- A. Tax preferences increase the complexity of the law.
- B.** Tax preferences raise additional revenue for the government.
- C. Tax preferences are government subsidies for targeted taxpayer activities.
- D. Tax preferences do not improve the accurate measurement of the tax base.

Tax preferences lose revenue for the government.

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

55. Which of the following statements concerning tax preferences is **true**?

- A.** The annual revenue loss from federal tax preferences is quantified in the Tax Expenditures Budget.
- B. Tax preferences increase the fairness of the tax law.
- C. Tax preferences simplify the tax law.
- D. Tax preferences make the tax law more neutral across taxpayers.

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Contrast the classical and the modern concepts of tax efficiency.*

56. Which of the following statements about horizontal equity is **false**?
- A. Horizontal equity focuses on a rational and impartial measurement of the tax base.
  - B. Horizontal equity focuses on the measurement of taxpayers' ability to pay.
  - C. If persons with equal ability to pay a tax owe an equal amount of tax, the tax is horizontally equitable.
  - D.** None of the above is false.

*Difficulty: 1 Easy*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

57. The federal income tax law allows individuals whose property is destroyed by a natural disaster such as a fire or hurricane to reduce their taxable income by the amount of their financial loss. This rule is intended to improve the:
- A. Convenience of the tax
  - B. Efficiency of the tax
  - C.** Horizontal equity of the tax
  - D. Vertical equity of the tax

Individuals who must replace property destroyed by a disaster arguably have less ability to pay income tax.

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

58. The sales tax laws of many states exempt the purchase of groceries and prescription drugs from tax. Such exemptions are intended to improve the:
- A. Convenience of the tax
  - B.** Equity of the tax
  - C. Sufficiency of the tax
  - D. Neutrality of the tax

Nondiscretionary purchases such as food and medicine reduce the purchaser's ability to pay tax.

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

59. Which of the following statements about vertical equity is **false**?

- A. Vertical equity focuses on a fair rate structure instead of a fair measurement of the tax base.
- B. If persons with greater ability to pay owe more tax than persons with lesser ability to pay, the tax is vertically equitable.
- C.** A tax with a single percentage rate is not vertically equitable.
- D. None of the above is false.

Even under a proportionate rate structure, taxpayers with more base pay more tax than taxpayers with less base.

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

60. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Which of the following statements is **true**?

- A. The schedule provides no information as to whether Jurisdiction M's tax is horizontally equitable.
- B. Jurisdiction M's tax is vertically equitable.
- C. Jurisdiction M's tax is vertically equitable only for individuals with \$50,000 or less taxable income.
- D.** Both A. and B. are true.

The schedule does not provide information as to whether the definition of taxable income accurately reflects ability to pay. The tax is vertically equitable because taxpayers with more income pay more tax than taxpayers with less income.

*Difficulty: 3 Hard*

*Learning Objective: 02-05 Define horizontal and vertical equity.*



61. Which of the following statements about a regressive tax rate structure is **false**?

- A.** A regressive rate structure cannot result in vertical equity.
- B. Regressive rates decrease as the tax base increases.
- C. A regressive rate structure places a proportionally heavier tax burden on taxpayers with smaller tax bases than persons with greater tax bases.
- D. None of the above is false.

Even with a regressive rate structure, persons with a smaller tax base will pay less tax than persons with a greater tax base.

*Difficulty: 3 Hard*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

62. Vervet County levies a real property tax based on the following schedule.

<i>Rate</i>	<i>Assessed value</i>
3%	\$-0- to \$250,000
+ 1%	\$250,001 and above

Which type of rate structure does this tax use?

- A. Proportionate
- B.** Regressive
- C. Progressive
- D. Dual-bracket

*Difficulty: 1 Easy*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

63. Vervet County levies a real property tax based on the following schedule.

<i>Rate</i>	<i>Assessed value</i>
3%	\$-0- to \$250,000
+ 1%	\$250,001 and above

Bilex Inc. owns real property valued at \$629,800. Compute Bilex's tax on this property.

- A. \$13,798
- B. \$7,500
- C. \$6,298
- D.** None of the above

Bilex's tax is \$11,298 ( $[3\% * \$250,000] + [1\% * \$379,800]$ ).

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

64. Vervet County levies a real property tax based on the following schedule.

<i>Rate</i>	<i>Assessed value</i>
3%	\$-0- to \$250,000
+ 1%	\$250,001 and above

Which of the following statements is **false**?

- A. If Mr. Clem owns real property valued at \$112,500, his average tax rate is 3%.
- B. If Ms. Barker owns real property valued at \$455,650, her average tax rate is 2.1%.
- C. If Ms. Lumley owns real property valued at \$750,000, her marginal tax rate is 1%.
- D.** None of the above is false.

Ms. Barker's tax is \$9,557 ( $[3\% * \$250,000] + [1\% * \$205,650]$ ), so her average tax rate is 2.1% ( $\$9,557/\$455,650$ ).

*Difficulty: 3 Hard*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*

65. Which of the following statements about tax rate structures is **true**?

- A. Regressive rate structures are illegal in the United States.
- B. A tax with a graduated rate structure must be either regressive or progressive.**
- C. A proportionate rate structure is the only structure resulting in vertical equity.
- D. None of the above is true.

A graduated rate structure must include at least two different rates, which either decrease or increase as the tax base increases.

*Difficulty: 3 Hard*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

66. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Which type of rate structure does this tax use?

- A. Proportionate
- B. Regressive
- C. Progressive**
- D. Multi-bracket

*Difficulty: 1 Easy*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

67. Which of the following statements about a progressive tax rate structure is **false**?

- A. Progressive rates increase as the tax base increases.
- B. Progressive rates reflect the theory of the declining marginal utility of income.
- C. The federal income tax has always used a progressive rate structure.
- D. Progressive rates result in greater vertical equity than a proportionate rate.**

Both progressive rates and a proportionate rate result in vertical equity.

*Difficulty: 3 Hard*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

68. Which of the following statements about a proportionate income tax rate structure is **false**?

- A. A theoretic justification for a proportionate rate is its superior potential for wealth redistribution.**
- B. Under a proportionate rate structure, the marginal rate equals the average rate.
- C. Under a proportionate rate structure, the taxpayer with the least income pays the same percentage of income to the government as the taxpayer with the most income.
- D. None of the above is false.

Wealth redistribution is a theoretic justification for a progressive rate structure.

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*

69. Which of the following statements concerning income tax rate structures is **false**?

- A. Under a progressive rate structure, the marginal rate and the average rate are equal.**
- B. Under a regressive rate structure, the average rate for low-income individuals is more than the average rate for high-income individuals.
- C. Under either a regressive, proportionate, or progressive rate structure, high-income taxpayers pay more dollars of tax than low-income individuals.
- D. In theory, a progressive rate structure results in equal economic sacrifice across taxpayers.

The marginal rate and average rate are equal under a proportionate rate structure.

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*

70. Which of the following statements concerning a regressive tax rate structure is **true**?

- A. A regressive tax rate structure is justified by the tax policy of distributive justice.
- B. A regressive rate structure is justified by the theory of the declining marginal utility of income.
- C. Under a regressive rate structure, the average tax rate for high-income taxpayers is less than the marginal tax rate.
- D.** None of the above statements is true.

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

*Learning Objective: 02-08 Discuss distributive justice as a tax policy objective.*

71. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Mr. Coen has \$78,000 taxable income. Compute the tax on this income.

- A.** \$4,740
- B. \$6,240
- C. \$8,740
- D. None of the above

$$(5\% * \$50,000) + (8\% * \$28,000) = \$4,740$$

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

72. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Ms. Owen has \$314,000 taxable income. Compute the tax on this income.

A. \$29,680

**B.** \$28,180

C. \$37,680

D. None of the above

$$(5\% * \$50,000) + (8\% * \$150,000) + (12\% * \$114,000) = \$28,180$$

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

73. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Which of the following statements is **true**?

- A. If Mrs. Hall's taxable income is \$227,000, her average tax rate is 12%.
- B. If Mr. Poe's taxable income is \$41,200, his marginal tax rate is 8%.
- C.** If Ms. Kaye's taxable income is \$63,800, her marginal tax rate is 8%.
- D. None of the above is true.

*Difficulty: 2 Medium*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*



74. Jurisdiction M imposes an individual income tax based on the following schedule.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 8%	\$50,001 to \$200,000
+ 12%	\$200,001 and above

Which of the following statements is **false**?

- A. If Ms. Lui's taxable income is \$33,400, her average tax rate is 5%.
- B. If Mr. Bell's taxable income is \$519,900, his marginal tax rate is 12%.
- C. If Ms. Vern's taxable income is \$188,000, her average tax rate is 7.2%.
- D.** None of the above is false.

Ms. Vern's tax is \$13,540 ( $[5\% * \$50,000] + [8\% * \$138,000]$ ), so her average tax rate is 7.2% ( $\$13,540/\$188,000$ ).

*Difficulty: 3 Hard*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*

75. Congress originally enacted the federal estate and gift taxes to improve:

- A.** Distributional justice
- B. Economic efficiency
- C. Vertical equity
- D. Horizontal equity

*Difficulty: 1 Easy*

*Learning Objective: 02-08 Discuss distributive justice as a tax policy objective.*

76. Which of the following tax policies would increase the redistribution of wealth across society?

- A. Repealing the federal estate and gift taxes
- B. Increasing the highest marginal income tax rate by 10%**
- C. Replacing the progressive income tax rate structure with a flat rate
- D. Replacing the income tax with a national sales tax

Replacing the progressive rate structure with a flat rate or replacing the progressive income tax with an arguably regressive sales tax would reduce wealth redistribution.

*Difficulty: 3 Hard*

*Learning Objective: 02-08 Discuss distributive justice as a tax policy objective.*

77. Which of the following statements concerning the standard of fairness is **false**?

- A. People who believe that a tax is unfair are more likely to evade the tax.
- B. People believe that the federal income tax is unfair because it contains preferences available only to wealthy individuals.
- C. The public perception that the federal income tax is unfair has decreased in recent decades.**
- D. None of the above is false.

The public perception of unfairness has increased in recent decades.

*Difficulty: 2 Medium*

*Learning Objective: 02-08 Discuss distributive justice as a tax policy objective.*

78. Congress plans to amend the federal income tax to provide a deduction for the first \$2,400 of residential rent paid by families with incomes below the federal poverty level. Which of the following statements is **true**?

- A. The amendment is intended to improve the efficiency of the tax.
- B. The amendment is intended to improve the equity of the tax.**
- C. The amendment is intended to improve the simplicity of the tax.
- D. The amendment is intended to improve the convenience of the tax.

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

79. Congress plans to amend the federal individual income tax to eliminate the deductions for medical care, educational savings, charitable contributions, and home mortgage interest. Which of the following statements is **true**?

- A. The amendment will reduce the complexity of the tax.
- B. The amendment will increase the horizontal equity of the tax.
- C. The amendment will increase the neutrality of the tax.
- D.** Both the amendment will reduce the complexity of the tax and will increase the neutrality of the tax.

The amendment reduces complexity because it simplifies measurement of the tax base. It increases neutrality because it eliminates preferences available to only certain taxpayers. However, the amendment makes the measurement of each individual's ability to pay *less precise* and, therefore, reduces horizontal equity.

*Difficulty: 3 Hard*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

80. Congress plans to amend the federal income tax to provide a deduction for the cost of energy-efficient fluorescent light bulbs. Which of the following statements is **true**?

- A.** The amendment is intended to improve the efficiency of the tax.
- B. The amendment is intended to improve the equity of the tax.
- C. The amendment is intended to improve the simplicity of the tax.
- D. The amendment is intended to improve the convenience of the tax.

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

81. Congress recently amended the tax law to make it easier for individuals to file their income tax returns electronically (online). Which of the following statements is **true**?

- A. The amendment is intended to improve the efficiency of the tax.
- B. The amendment is intended to improve the equity of the tax.
- C. The amendment is intended to improve the simplicity of the tax.
- D.** The amendment is intended to improve the convenience of the tax.

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

*Learning Objective: 02-05 Define horizontal and vertical equity.*

**Application Problems**

82. Mr. and Mrs. Boln earn \$63,000 annual income and pay 20% in state and federal income tax. If tax rates increase so that the couple's annual rate increases to 25%, how much additional income must they earn to maintain their after-tax standard of living?

The Bolns' after-tax income *before* the rate increase is \$50,400 ( $\$63,000 - [\$63,000 * 20\%]$ ). To maintain their after-tax income *after* the rate increase, the Bolns must earn \$4,200 additional income to increase their before-tax income to \$67,200 ( $\$50,400/75\%$ ) on which they will pay \$16,800 tax.

*Difficulty: 2 Medium*

*Learning Objective: 02-02 Differentiate between the income effect and the substitution effect.*

83. Mr. Ohno owns and operates a part-time service business that generates \$80,000 annual taxable income. His federal tax rate on this income is 17%. Because of recent legislation, this rate will increase to 25% next year.

A. Based on a static forecast, how much additional revenue will the federal government collect from Mr. Ohno next year?

B. How much additional revenue will the federal government collect if Mr. Ohno decides to work fewer hours and consequently earns only \$50,000 next year?

A. The federal government will collect \$6,400 additional revenue ( $\$80,000 * 8\%$  rate increase).

B. The federal government will collect \$1,100 *less* revenue ( $[\$50,000 * 25\%] - [\$80,000 * 17\%]$ ).

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Explain the concept of sufficiency of a good tax.*

84. The City of Willford levies a flat 7% tax on individual income in excess of \$55,000. Individuals who earn \$55,000 or less pay no income tax.

A. Ms. Vello earned \$127,200 income this year. Compute her city income tax and determine her average tax rate.

B. Mr. Sui earned \$68,900 income this year. Compute his city income tax and determine his average tax rate.

C. Does Willford have a proportionate, progressive, or regressive tax rate structure?

A. Ms. Vello's tax is \$5,054 ( $\$127,200 * 7\%$ ), and her average tax rate is 3.97% ( $\$5,054/\$127,200$ ).

B. Mr. Sui's tax is \$973 ( $\$68,900 * 7\%$ ), and his average tax rate is 1.41% ( $\$973/\$68,900$ ).

C. Willford has a progressive tax rate structure because the rate increases as the base increases.

*Difficulty: 3 Hard*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*

85. The country of Valhalla levies an income tax with the following rate structure.

<i>Rate</i>	<i>Income bracket</i>
5%	\$-0- to \$50,000
+ 10%	\$50,001 to \$150,000
+ 20%	\$150,001 and above

- A. Mrs. Greene's annual income is \$125,000. Compute her tax, her average tax rate, and her marginal tax rate.
- B. Mr. Chen's annual income is \$220,000. Compute his tax, his average tax rate, and his marginal tax rate.
- C. Does Valhalla have a proportionate, progressive, or regressive tax rate structure?

- A. Mrs. Greene's tax is  $\$10,000 = (5\% \times \$50,000) + (10\% \times \$75,000)$ . Her average tax rate is 8% ( $\$10,000/\$125,000$ ), and her marginal tax rate is 10%.
- B. Mr. Chen's tax is  $\$26,500 = (5\% \times \$50,000) + (10\% \times \$100,000) + (20\% \times \$70,000)$ . His average tax rate is 12.05% ( $\$26,500/\$220,000$ ) and his marginal tax rate is 20%.
- C. Valhalla has a progressive tax rate structure because the rate increases as the base increases.

*Difficulty: 3 Hard*

*Learning Objective: 02-06 Differentiate between regressive; proportionate; and progressive rate structures.*

*Learning Objective: 02-07 Explain the difference between marginal and average tax rates.*