***Essentials of Federal Taxation, 11e* (Spilker)**

**Chapter 1 An Introduction to Tax**

1) Taxes influence many types of business decisions but generally do not influence personal decisions.

2) Taxes influence business decisions such as where a business should locate or how a business should be structured.

3) Tax policy rarely plays an important part in presidential campaigns.

4) Margaret recently received a parking ticket. This is a common example of a local tax.

5) George recently paid $50 to renew his driver's license. The $50 payment is considered a tax.

6) A 1 percent charge imposed by a local government on football tickets sold is not considered a tax if all proceeds are earmarked to fund local schools.

7) One key characteristic of a tax is that it is a required payment to a governmental agency.

8) Common examples of sin taxes include the taxes imposed on airline tickets and gasoline.

9) One benefit of a sin tax (e.g., a tax on cigarettes) is that it should increase the demand for the products being taxed.

10) In addition to raising revenues, specific U.S. taxes may have other objectives (e.g., economic or social objectives).

11) The two components of the tax calculation are the tax rate and the taxpayer's status.

12) The tax base for the federal income tax is taxable income.

13) A flat tax is an example of a graduated tax system.

14) The main difficulty in calculating an income tax is determining the correct amount of the tax base.

15) A taxpayer's average tax rate is the most appropriate tax rate to use in tax planning.

16) The effective tax rate, in general, provides a better depiction of a taxpayer's tax burden than the average tax rate.

17) The effective tax rate expresses the taxpayer's total tax as a percentage of the taxpayer's taxable and nontaxable income.

18) In a proportional (flat) tax rate system, the marginal tax rate will always equal the average tax rate.

19) In a regressive tax rate system, the marginal tax rate will often be greater than the average tax rate.

20) A sales tax is a common example of a progressive tax rate structure.

21) In terms of effective tax rates, the sales tax can be viewed as a regressive tax.

22) While sales taxes are quite common, currently the U.S. federal government does not impose a sales tax.

23) The largest federal tax, in terms of revenue collected, is the Social Security tax.

24) The 9th Amendment to the U.S. Constitution removed all doubt that a federal income tax was allowed under the U.S. Constitution.

25) A common example of an employment-related tax is the Medicare tax.

26) Self-employment taxes are charged on self-employment income in addition to any federal income tax.

27) Excise taxes are typically levied on the value of a good purchased.

28) The estate tax is assessed based on the fair market values of transfers made during a taxpayer's life.

29) A use tax is typically imposed by a state on goods purchased within the state.

30) Property taxes may be imposed on both real and personal property.

31) Relative to explicit taxes, implicit taxes are much easier to estimate.

32) Implicit taxes are indirect taxes on tax-favored assets.

33) Dynamic forecasting does not take into consideration taxpayers' responses to a tax change when estimating tax revenues.

34) The income and substitution effects are two opposing effects that one could consider in static forecasting.

35) Horizontal equity is defined in terms of taxpayers in similar situations whereas vertical equity is defined in terms of taxpayers in different situations.

36) Regressive tax rate structures are typically considered to be vertically equitable.

37) Estimated tax payments are one way the federal income tax system addresses the "certainty" criterion in evaluating tax systems.

38) One must consider the "economy" criterion in evaluating tax systems from both the taxpayer's and the government's perspective.

39) Taxes influence which of the following decisions?

A) Business decisions

B) Personal decisions

C) Political decisions

D) Investment decisions

E) All of the choices are correct.

40) Margaret was issued a $150 speeding ticket. This is:

A) a tax because payment is required by law.

B) a tax because the payment is not related to any specific benefit received from the government agency collecting the ticket.

C) not a tax because it is considered a fine intended to punish illegal behavior.

D) a tax because it is imposed by a government agency.

E) not a tax because Margaret could have avoided payment if she did not speed.

41) Which of the following is a tax?

I. A 1 percent special sales tax for funding local road construction.

II. A fee paid to the state for a license to practice as an attorney.

III. An income tax imposed by Philadelphia on persons working within the city limits.

IV. A special property assessment for installing a new water system in the taxpayer's neighborhood.

A) Only I is correct.

B) Only IV is correct.

C) Only III is correct.

D) III and IV are correct.

E) I and III are correct.

42) Which of the following is considered a tax?

A) Tolls

B) Parking meter fees

C) Annual licensing fees

D) A local surcharge paid on retail sales to fund public schools

E) Entrance fees paid at national parks

43) Earmarked taxes are:

A) taxes assessed only on certain taxpayers.

B) taxes assessed to fund a specific purpose.

C) taxes assessed for only a specific time period.

D) taxes assessed to discourage less desirable behavior.

E) None of the choices are correct.

44) Sin taxes are:

A) taxes assessed by religious organizations.

B) taxes assessed on certain illegal acts.

C) taxes assessed to discourage less desirable behavior.

D) taxes assessed to fund a specific purpose.

E) None of the choices are correct.

45) To calculate a tax, you need to know:

I. the tax base

II. the taxing agency

III. the tax rate

IV. the purpose of the tax

A) Only I is correct.

B) Only IV is correct.

C) Only III is correct.

D) Items I through IV are correct.

E) I and III are correct.

46) Which of the following is not an example of a graduated tax rate structure?

A) Progressive tax rate structure

B) Proportional tax rate structure

C) U.S. federal income tax

D) Regressive tax rate structure

E) None of the choices are correct

47) The difficulty in calculating a tax is typically in the determination of:

A) the correct tax rate.

B) where to file the tax return.

C) the tax base.

D) the due date for the return.

E) None of the choices are correct.

48) Which of the following is not one of the basic tax rate structures?

A) Proportional

B) Equitable

C) Regressive

D) Progressive

E) All of these are different kinds of the basic tax rate structures

49) Marc, a single taxpayer, earns $60,000 in taxable income and $5,000 in interest from an investment in city of Birmingham bonds. Using the U.S. tax rate schedule for 2019, how much federal tax will he owe? **(Round your final answer to the nearest whole dollar.)** (Use tax rate schedule.)

A) $13,200

B) $9,059

C) $7,638

D) $6,812

E) None of the choices are correct

50) Marc, a single taxpayer, earns $60,000 in taxable income and $5,000 in interest from an investment in city of Birmingham bonds. Using the U.S. tax rate schedule for 2019, what is his average tax rate (rounded)? **(Round your final answer to the nearest whole percent.)** (Use tax rate schedule.)

A) 15.10 percent

B) 12.73 percent

C) 11.35 percent

D) 22.00 percent

E) None of the choices are correct

51) Marc, a single taxpayer, earns $60,000 in taxable income and $5,000 in interest from an investment in city of Birmingham bonds. Using the U.S. tax rate schedule for year 2019, what is his effective tax rate (rounded)? **(Round your final answer to the nearest whole percent.)** (Use tax rate schedule.)

A) 20.31 percent

B) 13.94 percent

C) 11.75 percent

D) 10.48 percent

E) None of the choices are correct

52) Marc, a single taxpayer, earns $60,000 in taxable income and $5,000 in interest from an investment in city of Birmingham bonds. Using the U.S. tax rate schedule for year 2019, what is his current marginal tax rate? (Use tax rate schedule.)

A) 12.00 percent

B) 22.00 percent

C) 24.00 percent

D) 32.00 percent

E) None of the choices are correct

53) The city of Granby, Colorado, recently enacted a 1.5 percent surcharge on vacation cabin rentals that will fund the city's new elementary school. This surcharge is an example of \_\_\_\_\_\_\_\_.

A) a sin tax to discourage undesirable behavior

B) a government fine

C) an earmarked tax

D) a sin tax to discourage undesirable behavior and an earmarked tax

E) None of the choices are correct

54) The state of Georgia recently increased its tax on a carton of cigarettes by $2.00. What type of tax is this?

A) A sin tax

B) An excise tax

C) It is not a tax; it is a fine

D) A sin tax and an excise tax are correct

E) None of the choices are correct

55) Which of the following is false?

A) A proportional tax rate structure imposes a constant tax rate while a progressive tax rate structure imposes an increasing marginal rate related to the tax base.

B) The average tax rate changes under a proportional tax rate structure, but it is static for a progressive tax rate system.

C) An example of a proportional tax is the tax on gasoline.

D) An example of a progressive tax is the federal tax on gifts.

E) None of the choices are correct.

56) Which of the following is true?

A) A regressive tax rate structure imposes an increasing marginal tax rate as the tax base increases.

B) Regressive tax structures are the most common tax rate structure.

C) An example of a regressive tax is an excise tax.

D) In terms of effective tax rates, a sales tax can be viewed as a regressive tax.

E) None of the choices are correct.

57) The ultimate economic burden of a tax is best captured by:

A) the marginal tax rate.

B) the effective tax rate.

C) the average tax rate.

D) the proportional tax rate.

E) None of the choices are correct.

58) Which of the following taxes represents the largest portion of U.S. federal tax revenues?

A) Employment taxes

B) Corporate income taxes

C) Individual income taxes

D) Estate and gift taxes

E) None of the choices are correct

59) Which of the following represents the largest percentage of average state tax revenue?

A) Sales tax

B) Individual income tax

C) Other

D) Property tax

E) None of the choices are correct

60) Which of the following is true regarding use taxes?

A) A use tax is relatively easy to enforce compared to a sales tax.

B) Use taxes attempt to eliminate any tax advantage of purchasing goods out of state.

C) Use taxes encourage taxpayers to buy goods out of state to avoid paying sales tax in their home state.

D) A use tax is generally a progressive tax.

E) None of the choices are correct.

61) Which of the following is true regarding real property taxes and personal property taxes?

A) Personal property taxes are assessed on permanent structures and land.

B) Real property taxes are assessed on cars and boats.

C) All U.S. states currently impose personal property taxes.

D) Real property taxes are generally easier to administer than personal property taxes.

E) None of the choices are correct.

62) Which of the following statements is true?

A) Municipal bond interest is subject to explicit federal tax.

B) Municipal bond interest is subject to implicit tax.

C) Municipal bonds typically pay a higher interest rate than corporate bonds with similar risk.

D) All of these statements are true.

E) None of these statements are true.

63) The concept of tax sufficiency:

A) suggests the need for tax forecasting.

B) suggests that a government should estimate how taxpayers will respond to changes in the current tax structure.

C) suggests that a government should consider the income and substitution effects when changing tax rates.

D) All of the choices are correct.

E) None of the choices are correct.

64) The substitution effect:

A) predicts that taxpayers will work harder to pay for consumer products when tax rates increase.

B) is one of the effects considered in static forecasting.

C) results in the government collecting more aggregate tax revenue than under the income effect.

D) is typically more descriptive for taxpayers with lower disposable income.

E) None of the choices are correct.

65) Which of the following federal government actions would make sense if a tax system fails to provide sufficient tax revenue?

A) Only issue treasury bonds.

B) Only cut funding to various federal projects.

C) Only increase federal spending.

D) Issue treasury bonds and cut funding to various federal projects but not increase federal spending.

E) None of the choices are correct.

66) Geronimo files his tax return as a head of household for year 2019. If his taxable income is $72,000, what is his average tax rate (rounded)? (Use tax rate schedule.)

A) 14.28 percent

B) 6.31 percent

C) 19.08 percent

D) 22.00 percent

E) None of the choices are correct

67) Al believes that SUVs have negative social and environmental effects because of their increased carbon monoxide emissions. He proposes eliminating sales taxes on smaller automobiles in favor of higher sales taxes levied on SUVs. Al performs some calculations and comes to the conclusion that based on the current number of SUVs owned in the U.S., exactly the same amount of total sales tax will be collected under his reformed system. Which of the following concepts explains why Al's idea may not work?

A) The ability to pay principle

B) Horizontal equity

C) Substitution effect

D) Vertical equity

E) None of the choices are correct

68) Which of the following would not be a failure of the horizontal equity concept?

A) Two taxpayers with identical income pay different amounts of tax because one taxpayer's income includes tax-exempt interest.

B) Two taxpayers pay different property tax amounts on similar plots of land (i.e., same value) because one plot of land is used to raise crops.

C) Two taxpayers pay different amounts of estate tax because one taxpayer's estate is worth significantly more.

D) All of the choices are correct.

E) None of the choices are correct.

69) Which of the following is true regarding tax-advantaged assets?

A) They are typically subject to excise taxes to account for their low explicit taxes.

B) A corporate bond is typically considered a tax-advantaged asset.

C) They are often subject to implicit taxes.

D) A corporate bond is typically considered a tax-advantaged asset. They are often subject to implicit taxes but they are not typically subject to excise taxes to account for their low explicit taxes.

E) None of the choices are correct.

70) Congress recently approved a new, smaller budget for the IRS. What taxation concept evaluates the cost of administering our tax law?

A) Convenience

B) Economy

C) Certainty

D) Equity

E) None of the choices are correct

71) Employers often withhold federal income taxes directly from workers' paychecks. This is an example of which principle in practice?

A) Convenience

B) Certainty

C) Economy

D) Equity

E) None of the choices are correct

72) Which of the following principles encourages a vertically equitable tax system?

A) Pay-as-you-go

B) Economy

C) Income effects

D) Ability to pay principle

E) None of the choices are correct

73) Manny, a single taxpayer, earns $65,000 per year in taxable income and an additional $12,000 per year in city of Boston bonds. What is Manny's current marginal tax rate for 2019? (Use tax rate schedule.)

A) 11.40 percent

B) 12.00 percent

C) 13.19 percent

D) 15.63 percent

E) None of the choices are correct.

74) Manny, a single taxpayer, earns $65,000 per year in taxable income and an additional $12,000 per year in city of Boston bonds.

If Manny earns an additional $35,000 in taxable income in 2019, what is his marginal tax rate (rounded) on this income? (Use tax rate schedule.)

A) 18.01 percent

B) 22.00 percent

C) 22.90 percent

D) 24.00 percent

E) None of the choices are correct

75) Leonardo, who is married but files separately, earns $80,000 of taxable income. He also has $15,000 in city of Tulsa bonds. His wife, Theresa, earns $50,000 of taxable income.

If Leonardo earned an additional $30,000 of taxable income this year, what would be the marginal tax rate (rounded) on the extra income for 2019? (Use tax rate schedule.)

A) 22.00 percent

B) 18.81 percent

C) 24.00 percent

D) 23.72 percent

E) None of the choices are correct

76) Leonardo, who is married but files separately, earns $80,000 of taxable income. He also has $15,000 in city of Tulsa bonds. His wife, Theresa, earns $50,000 of taxable income.

If Leonardo instead had $30,000 of additional tax deductions for 2019, his marginal tax rate (rounded) on the deductions would be: (Use tax rate schedule.)

A) 12.00 percent

B) 13.88 percent

C) 22.00 percent

D) 24.00 percent

E) None of the choices are correct

77) Leonardo, who is married but files separately, earns $80,000 of taxable income. He also has $15,000 in city of Tulsa bonds. His wife, Theresa, earns $50,000 of taxable income.

If Leonardo and his wife file married filing jointly in 2019, what would be their average tax rate (rounded)? (Use tax rate schedule.)

A) 12.00 percent

B) 22.00 percent

C) 15.63 percent

D) 18.70 percent

E) None of the choices are correct

78) Leonardo, who is married but files separately, earns $80,000 of taxable income. He also has $15,000 in city of Tulsa bonds. His wife, Theresa, earns $50,000 of taxable income.

If Leonardo and his wife file married filing jointly in 2019, What is Leonardo and Theresa's effective tax rate for 2019 (rounded)? (Use tax rate schedule.)

A) 12.00 percent

B) 15.63 percent

C) 21.04 percent

D) 22.00 percent

E) None of the choices are correct

79) Leonardo, who is married but files separately, earns $80,000 of taxable income. He also has $15,000 in city of Tulsa bonds. His wife, Theresa, earns $50,000 of taxable income.

How much money would Leonardo and Theresa save if they file jointly instead of separately for 2019? (Use tax rate schedule.)

A) Nothing

B) $103.50

C) $309.75

D) $5,932.50

E) None of the choices are correct.

80) If Susie earns $750,000 in taxable income, how much tax will she pay as a single taxpayer for 2019? (Use tax rate schedule.)

A) $215,640

B) $277,500

C) $242,488

D) $247,189

E) None of the choices are correct

81) If Susie earns $750,000 in taxable income and files as head of household for year 2019, what is Susie's average tax rate (rounded)? (Use tax rate schedule.)

A) 32.14 percent

B) 33.85 percent

C) 35.00 percent

D) 37.00 percent

E) None of the choices are correct

82) Eliminating the current system of withholding income taxes directly from employee paychecks would:

A) violate the convenience criterion of federal taxation.

B) increase the rate of compliance.

C) make collection of federal income taxes easier.

D) All of the choices are correct.

E) None of the choices are correct.

83) Curtis invests $250,000 in a city of Athens bond that pays 7 percent interest. Alternatively, Curtis could have invested the $250,000 in a bond recently issued by Initech, Inc. that pays 9 percent interest with similar risk as the city of Athens bond. Assume that Curtis's marginal tax rate is 24 percent.

What is Curtis's after-tax rate of return on the city of Athens bond?

A) 5.32 percent

B) 6.84 percent

C) 7.00 percent

D) 9.00 percent

E) None of the choices are correct

84) Curtis invests $250,000 in a city of Athens bond that pays 7 percent interest. Alternatively, Curtis could have invested the $250,000 in a bond recently issued by Initech, Inc. that pays 9 percent interest with similar risk as the city of Athens bond. Assume that Curtis's marginal tax rate is 24 percent.

How much implicit tax would Curtis pay on the city of Athens bond?

A) $17,500

B) $1,400

C) $1,300

D) $5,000

E) None of the choices are correct

85) Curtis invests $250,000 in a city of Athens bond that pays 7 percent interest. Alternatively, Curtis could have invested the $250,000 in a bond recently issued by Initech, Inc. that pays 9 percent interest with similar risk as the city of Athens bond. Assume that Curtis's marginal tax rate is 24 percent.

If Curtis invested in the Initech, Inc. bonds, what would be his after-tax rate of return from this investment?

A) 5.32 percent

B) 7.00 percent

C) 6.84 percent

D) 2.52 percent

E) None of the choices are correct

86) Curtis invests $250,000 in a city of Athens bond that pays 7 percent interest. Alternatively, Curtis could have invested the $250,000 in a bond recently issued by Initech, Inc. that pays 9 percent interest with similar risk as the city of Athens bond. Assume that Curtis's marginal tax rate is 24 percent.

How much explicit tax would Curtis incur on interest earned on the Initech, Inc. bond?

A) $17,500

B) $5,400

C) $4,200

D) $12,600

E) None of the choices are correct.

87) Jackson has the choice to invest in city of Mitchell bonds or Sundial, Inc. corporate bonds that pay 10 percent interest. Jackson is a single taxpayer who earns $55,000 annually. Assume that the city of Mitchell bonds and the Sundial, Inc. bonds have similar risk.

What interest rate would the city of Mitchell have to pay in order to make Jackson indifferent between investing in the city of Mitchell and the Sundial, Inc. bonds for 2019? (Use tax rate schedule.)

A) 7.80 percent

B) 10.00 percent

C) 8.00 percent

D) 7.20 percent

E) None of the choices are correct

88) Jackson has the choice to invest in city of Mitchell bonds or Sundial, Inc. corporate bonds that pay 10 percent interest. Jackson is a single taxpayer who earns $55,000 annually. Assume that the city of Mitchell bonds and the Sundial, Inc. bonds have similar risk.

Assume the original facts as given except that Jackson is a head of household taxpayer and the city of Mitchell pays interest of 8 percent. How would you advise Jackson to invest his money?

A) Invest in Sundial, Inc. bonds because their explicit tax is greater than the implicit tax on city of Mitchell bonds.

B) Invest in city of Mitchell bonds because their implicit tax is greater than the explicit tax on Sundial, Inc. bonds.

C) Invest in Sundial, Inc. bonds because their explicit tax is less than the implicit tax on city of Mitchell bonds.

D) Invest in city of Mitchell bonds because their implicit tax is less than the explicit tax on Sundial, Inc. bonds.

E) None of the choices are correct.

89) Oswald is beginning his first tax course and does not really have a solid understanding of the role that taxes play in various decisions. Please describe for Oswald the various types of decisions that taxes may influence.

90) Determine if each of the following is a tax and why or why not.

a. $2.50 toll paid on the Florida Turnpike

b. $300 ticket for reckless driving

c. 1 percent local surcharge on hotel rooms to fund public roadways

d. 2 percent city surcharge on wages earned in the city of Philadelphia

91) Although the primary purpose of a tax system is to raise revenue, Congress uses the federal tax system for other purposes as well. Describe the other ways in which Congress uses the federal tax system. Be specific.

92) There are several different types of tax rates that taxpayers might use in different contexts. Describe each tax rate and how a taxpayer might use it.

93) Ricky and Lucy are debating several types of taxes. Their debate has focused on the different types of tax rate structures and whether they are "fair." Please define each tax rate structure, provide examples of each structure, and discuss how each structure may be viewed with respect to vertical equity.

94) Bart is contemplating starting his own business. His new business would operate as a sole proprietorship and would require hiring several employees. Describe the employment-related taxes that Bart should be aware of as he starts his new business as a self-employed business owner.

95) Raquel recently overheard two journalism students discussing the merits of the federal tax system. One student offered as an example of unfairness a well-known politician's spouse, who paid little income tax, as most of the spouse's income was earned in the form of municipal bond interest. What type of taxes is the journalism student considering in his example? What type of taxes is he ignoring? Define each type of tax. What role does each type of tax play in calculating relative tax burdens? What role does each type of tax play in evaluating fairness?

96) Mandy, the mayor of Bogart and a strong advocate of a clean downtown, is proposing an increase in the city sales tax from 7 percent to 50 percent on all packs of chewing gum purchased in Bogart. Based on the current gum sales, Mandy estimates that this tax will actually reduce the tax revenue on gum sales. What type of forecasting is Mandy using to derive her tax revenue estimates? What "effect" is her estimate based on? Does this necessarily imply that Mandy will be happy given her desire to have a clean downtown?

97) Milton and Rocco are having a heated debate regarding a national sales tax. Milton argues that a national sales tax is a proportional, vertically equitable tax. Rocco argues that a national sales tax would be a regressive, vertically inequitable tax. Explain both sides of the argument.

98) Evaluate the U.S. federal tax system on the certainty and economy criteria.

99) Jonah, a single taxpayer, earns $150,000 in taxable income and $10,000 in interest from an investment in city of Denver bonds. Using the U.S. tax rate schedule for year 2019, how much federal tax will he owe? What is his average tax rate? What is his effective tax rate? What is his current marginal tax rate? If Jonah earned an additional $40,000 of taxable income, what is his marginal tax rate on this income? **(Round the tax rates to two decimal places, e.g., .12345 as 12.35** **percent.)** (Use tax rate schedule.)

100) Heather, a single taxpayer who files as a head of household, earns $60,000 in taxable income and $5,000 in interest from an investment in city of Oxford bonds. Using the U.S. tax rate schedule for year 2019, how much federal tax will she owe? What is her average tax rate? What is her effective tax rate? What is her current marginal tax rate? If Heather has an additional $20,000 of tax deductions, what is her marginal tax rate on these deductions? **(Round the tax rates to two decimal places, e.g., .12345 as 12.35** **percent.)** (Use tax rate schedule).

101) Fred and Wilma, married taxpayers, earn $100,000 in taxable income and $20,000 in interest from an investment in city of Bedrock bonds. Using the U.S. tax rate schedule for married filing jointly for year 2019, how much federal tax will they owe? What is their average tax rate? What is their effective tax rate? What is their current marginal tax rate? If Fred and Wilma earn an additional $40,000 of taxable income, what is their marginal tax rate on this income? **(Round the tax rates to two decimal places, e.g., .12345 as 12.35** **percent.)** (Use tax rate schedule.)

102) Nick and Jessica are married taxpayers that file married filing separately. Jessica earns $250,000 of taxable income per year. Nick earns $130,000 of taxable income per year. Using the appropriate U.S. tax rate schedule for year 2019, how much tax does each of them pay? What are their marginal and average tax rates? How much tax would they save, if any, if they filed jointly? **(Round the tax rates to two decimal places, e.g., .12345 as 12.35** **percent.)** (Use tax rate schedule.)

103) Ariel invests $50,000 in a city of Las Vegas bond that pays 5 percent interest. Alternatively, Ariel could have invested the $50,000 in a bond recently issued by Jittery Joe's, Inc. that pays 8 percent interest with similar non-tax characteristics as the city of Las Vegas bond (e.g., similar risk). Assume that Ariel's marginal tax rate is 24 percent. What is her after-tax rate of return for the city of Las Vegas bond? For the Jittery Joe's, Inc. bond? How much explicit tax does Ariel pay on the city of Las Vegas bond? How much implicit tax does she pay on the city of Las Vegas bond? How much explicit tax would she have paid on the Jittery Joe's, Inc. bond? Which bond should she choose?

104) Nelson has the choice between investing in a city of Fruithurst bond at 4 percent or a J.B. Ribs, Inc. bond at 6.5 percent. Assuming that both bonds have the same nontax characteristics and that Nelson has a 40 percent marginal tax rate, in which bond should he invest? What interest rate offered by J.B. Ribs, Inc. would make Nelson indifferent between investing in the two bonds?

105) Namratha has the choice between investing in a city of Watkinsville bond at 4.5 percent or a Moe's, Inc. bond at 7 percent. Assuming that both bonds have the same nontax characteristics and that Namratha has a 32 percent marginal tax rate, in which bond should she invest? What interest rate offered by Moe's, Inc. would make Namratha indifferent between investing in the two bonds?

106) Given the following tax structure, what is the minimum tax that would need to be assessed on Lizzy to make the tax progressive with respect to average tax rates? What is the minimum tax that would need to be assessed on Lizzy to make the tax progressive with respect to effective tax rates?

|  |  |  |  |
| --- | --- | --- | --- |
| **Taxpayer** | **Salary** | **Muni-Bond Interest** | **Total Tax** |
| Mort | 20,000 | 5,000 | 4,000 |
| Lizzy | 80,000 | 30,000 | ??? |

107) Given the following tax structure, what is the minimum tax that would need to be assessed on Dora to make the tax progressive with respect to average tax rates? What is the minimum tax that would need to be assessed on Dora to make the tax progressive with respect to effective tax rates?

|  |  |  |  |
| --- | --- | --- | --- |
| **Taxpayer** | **Salary** | **Muni-Bond Interest** | **Total Tax** |
| Diego | 30,000 | 10,000 | 1,500 |
| Dora | 50,000 | 5,000 | ??? |

108) Junior earns $80,000 taxable income as a regional circuit stock car driver and is taxed at an average rate of 25 percent (i.e., $20,000 of tax). If Congress increases the income tax rate such that Junior's average tax rate increases from 25 percent to 30 percent, how much more income tax will he pay assuming that the income effect is larger than the substitution effect? What effect will this tax rate change have on the tax base and tax collected? What will happen to the government's tax revenues if Junior chooses to spend more time pursuing his other passions besides work (e.g., earns only $60,000 in taxable income) in response to the tax rate change? What is the term that describes this type of reaction to a tax rate increase? **(Round your answers to two decimal places.)**

109) Given the following tax structure, what amount of tax would need to be assessed on Carrie to make the tax horizontally equitable? What is the minimum tax that Simon should pay to make the tax structure vertically equitable based on Fantasia's tax rate? This would result in what type of tax rate structure?

|  |  |  |
| --- | --- | --- |
| **Taxpayer** | **Salary** | **Total Tax** |
| Fantasia | 20,000 | 1,500 |
| Simon | 30,000 | 2,000 |
| Carrie | 20,000 | ??? |

110) Consider the following tax rate structures. Is it horizontally equitable? Why or why not? Is it vertically equitable? Why or why not?

|  |  |  |
| --- | --- | --- |
| **Taxpayer** | **Salary** | **Total Tax** |
| Lucy | 40,000 | $4,500 |
| Ricky | 20,000 | $4,500 |
| Ethel | 40,000 | $4,500 |

111) Consider the following tax rate structure. Is it horizontally equitable? Why or why not? Is it vertically equitable? Why or why not?

|  |  |  |
| --- | --- | --- |
| **Taxpayer** | **Salary** | **Total Tax** |
| Moe | 20,000 | 1,500 |
| Larry | 40,000 | 8,500 |
| Curly | 100,000 | 25,500 |

112) Jed Clampett is expanding his family-run beer distributorship into Georgia or Tennessee. His parents began the business many years ago and now three generations of Clampetts work in the family business. Jed will relocate the entire family (his parents, spouse, children, etc.) to either state after the move. What types of taxes may influence his decision of where to locate his business? What nontax factors may influence the decision?

113) Congress would like to increase tax revenues by 20 percent. Assume that the average taxpayer in the United States earns $80,000 and pays an average tax rate of 17.5 percent. If the income effect is larger than the substitution effect, what average tax rate will result in a 20 percent increase in tax revenues? This is an example of what type of forecasting?