Chapter 3 Tax Planning Strategies and Related Limitations

**TRUE/FALSE - Write 'T' if the statement is true and 'F' if the statement is false.**

1. The goal of tax planning is tax minimization.

* true
* false

1. Nontax factors do not play an important role in tax planning.

* true
* false

1. Virtually every transaction involves the taxpayer and two other parties that have an interest in the tax ramifications of the transaction.

* true
* false

1. The timing strategy is based on the idea that the location of where the income is taxed affects the tax costs of the income.

* true
* false

1. In general, tax planners prefer to accelerate deductions.

* true
* false

1. The concept of present value is an important part of the timing strategy.

* true
* false

1. Assuming an after-tax rate of return of 10 percent, John should prefer to pay an expense of $85 today instead of an expense of $100 in one year. Use Exhibit 3.1.

* true
* false

1. The time value of money suggests that $1 one year from now is worth less than $1 today.

* true
* false

1. The present value concept becomes more important as interest rates increase.

* true
* false

1. Future value can be computed as Future Value = Present Value ÷ (1 + r)n .

* true
* false

1. When considering cash inflows, higher present values are preferred.

* true
* false

1. When considering cash outflows, higher present values are preferred.

* true
* false

1. Tax savings generated from deductions are considered cash inflows.

* true
* false

1. In general, tax planners prefer to defer income. This is an example of the conversion strategy.

* true
* false

1. The timing strategy is particularly effective for cash-basis taxpayers.

* true
* false

1. The timing strategy becomes more attractive as tax rates decrease.

* true
* false

1. The timing strategy becomes more attractive as interest rates (i.e., rates of return) increase.

* true
* false

1. The timing strategy becomes more attractive if a taxpayer is able to accelerate deductions by two or more years (versus one year).

* true
* false

1. One limitation of the timing strategy is the difficulties in accelerating a tax deduction without accelerating the actual cash outflow that generates the tax deduction.

* true
* false

1. The constructive receipt doctrine is a natural limitation for the conversion strategy.

* true
* false

1. The constructive receipt doctrine is more of an issue for cash-basis taxpayers.

* true
* false

1. If tax rates will be higher next year, taxpayers should accelerate their deductions regardless of their after-tax rate of return.

* true
* false

1. If tax rates will be lower next year, taxpayers should accelerate their deductions regardless of their after-tax rate of return.

* true
* false

1. If tax rates will be higher next year, taxpayers should defer their income to next year regardless of their after-tax rate of return.

* true
* false

1. The value of a tax deduction is higher for a taxpayer with a lower tax rate.

* true
* false

1. The income-shifting strategy requires taxpayers with varying tax rates.

* true
* false

1. The assignment of income doctrine is a natural limitation to the timing strategy.

* true
* false

1. The business purpose, step-transaction, and substance-over-form doctrines may limit the income-shifting strategy.

* true
* false

1. Paying dividends to shareholders is one effective way of shifting income from a corporation to its shareholders.

* true
* false

1. The conversion strategy capitalizes on the fact that tax rates vary across different activities.

* true
* false

1. An investment's time horizon does not affect after-tax rates of return on investments taxed annually.

* true
* false

1. Implicit taxes may reduce the benefits of the conversion strategy.

* true
* false

1. Investors must consider complicit taxes as well as explicit taxes in order to make correct investment choices.

* true
* false

1. The business purpose, step-transaction, and substance-over-form doctrines may limit the conversion strategy.

* true
* false

1. Tax avoidance is a legal activity that forms the basis of the basic tax planning strategies.

* true
* false

1. Tax evasion is a legal activity that forms the basis of the basic tax planning strategies.

* true
* false

1. The downside of tax avoidance includes the potential of stiff monetary penalties and imprisonment.

* true
* false

**MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.**

1. The goal of tax planning generally is to:

minimize taxes.

minimize IRS scrutiny.

maximize after-tax wealth.

support the federal government.

None of the choices are correct.

1. Effective tax planning requires all of these considerations except:

nontax factors.

the taxpayer's tax costs of alternative transactions.

the other party's tax costs of alternative transactions.

the other party's nontax costs of alternative transactions.

All of the choices are required considerations.

1. Which is not a basic tax planning strategy?

Income shifting

Timing

Conversion

Arm's length transaction

None of the choices are correct.

1. Which of the following tax planning strategies is based on the present value of money?

Timing

Tax avoidance

Income shifting

Conversion

None of the choices are correct.

1. Assuming a positive interest rate, the present value of money suggests:

$1 today = $1 in one year.

$1 today > $1 in one year.

$1 today < $1 in one year.

$1 today ≤ $1 in one year.

None of the choices are correct.

1. If Joel earns a 10 percent after-tax rate of return, $10,000 received in two years is worth how much today? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$10,000

$9,090

$8,260

$11,000

None of the choices are correct.

1. If Joel earns a 9 percent after-tax rate of return, $15,000 received in two years is worth how much today? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$15,000

$13,740

$12,630

$16,350

None of the choices are correct.

1. If Lucy earns a 6 percent after-tax rate of return, $8,000 received in four years is worth how much today? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$8,000

$7,544

$8,989

$6,336

None of the choices are correct.

1. If Lucy earns a 8 percent after-tax rate of return, $14,000 received in four years is worth how much today? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$14,000

$12,904

$15,629

$10,290

None of the choices are correct.

1. If Nicolai earns an 8 percent after-tax rate of return, $20,000 today would be worth how much to Nicolai in five years? Use future value of $1.  
   **Note: Round discount factor(s) to four decimal places.**

$20,000

$13,620

$18,520

$21,600

None of the choices are correct.

1. If Nicolai earns an 6 percent after-tax rate of return, $5,000 today would be worth how much to Nicolai in five years? Use future value of $1.  
   **Note: Round discount factor(s) to four decimal places.**

$5,000

$3,744

$4,718

$5,300

None of the choices are correct.

1. If Scott earns a 12 percent after-tax rate of return, $15,000 today would be worth how much to Scott in two years? Usefuture value of $1.  
   **Note: Round discount factor(s) to five decimal places.**

$15,000

$11,955

$18,520

$18,816

None of the choices are correct.

1. If Rudy has a 25 percent tax rate and a 6 percent after-tax rate of return, a $30,000 tax deduction in four years will save how much tax in today's dollars? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$30,000

$7,500

$23,760

$5,940

None of the choices are correct.

1. If Jim invested $100,000 in an annual dividend-paying stock today with a 7 percent return, what investment time period will give Jim the greatest after-tax return?

1 year

5 years

10 years

20 years

All yield the same after-tax return.

1. If Julius has a 32 percent tax rate and a 10 percent after-tax rate of return, a $40,000 tax deduction in two years will save how much tax in today's dollars?Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$40,000

$10,573

$33,040

$12,800

None of the choices are correct.

1. If Julius has a 32 percent tax rate and a 12 percent after-tax rate of return, a $58,000 tax deduction in two years will save how much tax in today's dollars? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$58,000

$14,792

$46,226

$18,560

None of the choices are correct.

1. If Thomas has a 37 percent tax rate and a 6 percent after-tax rate of return, $50,000 of income in five years will cost him how much tax in today's dollars? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$50,000

$18,500

$37,350

$13,820

None of the choices are correct.

1. If Thomas has a 37 percent tax rate and a 9 percent after-tax rate of return, $81,500 of income in five years will cost him how much tax in today's dollars? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$81,500

$30,155

$55,452

$19,601

None of the choices are correct.

1. If Julius has a 22 percent tax rate and a 10 percent after-tax rate of return, $25,000 of income in three years will cost him how much tax in today's dollars? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$4,131

$18,775

$5,500

$25,000

None of the choices are correct.

1. If Julius has a 22 percent tax rate and a 6 percent after-tax rate of return, $40,000 of income in three years will cost him how much tax in today's dollars? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

$7,392

$33,600

$8,800

$40,000

None of the choices are correct.

1. Which of the following increases the benefits of income deferral?

Increasing tax rates

Smaller after-tax rate of return

Larger after-tax rate of return

Smaller magnitude of transactions

None of the choices are correct.

1. Which of the following decreases the benefits of accelerating deductions?

Decreasing tax rates

Smaller after-tax rate of return

Larger after-tax rate of return

Larger magnitude of transactions

None of the choices are correct.

1. Which of the following does not limit the benefits of deferring income?

Increasing tax rates

A taxpayer with severe cash flow needs

If continuing an investment would generate a low rate of return

If continuing an investment would subject the taxpayer to unnecessary risk

None of the choices are correct.

1. The constructive receipt doctrine:

is particularly restrictive for accrual-basis taxpayers.

causes income to be recognized before it is actually received.

causes income to be recognized after it is actually received.

applies equally to income and expenses.

None of the choices are correct.

1. Rolando's employer pays year-end bonuses each year on December 31. Rolando, a cash-basis taxpayer, would prefer not to pay tax on his bonus this year. So, he leaves town on December 31, 2022, and doesn't pick up his check until January 2, 2023. When should Rolando report his bonus?

2023

2022

Rolando can choose the year to report the income

More information is required to make the recommendation

None of the choices are correct.

1. If tax rates are decreasing:

taxpayers should accelerate income.

taxpayers should defer deductions.

taxpayers should defer income.

taxpayers should defer deductions and accelerate income.

None of the choices are correct.

1. If tax rates are decreasing:

taxpayers should accelerate income.

taxpayers should defer deductions.

taxpayers should accelerate deductions.

taxpayers should defer deductions and accelerate income.

None of the choices are correct.

1. If tax rates are increasing:

taxpayers should accelerate income.

taxpayers should defer deductions.

taxpayers should defer income.

you need more information to make a recommendation.

None of the choices are correct.

1. Which of the following is not required to determine the best timing strategy?

The taxpayer's after-tax rate of return

The taxpayer's tax rate this year

The taxpayer's tax rate in future years

The taxpayer's tax rate last year

None of the choices are correct.

1. Which of the following is an example of the timing strategy?

A corporation paying its shareholders a $20,000 dividend.

A parent employing her child in the family business.

A taxpayer gifting stock to his children.

A cash-basis business delaying billing its customers until after year-end.

None of the choices are correct.

1. Which of the following is an example of the timing strategy?

A cash-basis taxpayer paying all outstanding bills by year-end.

A parent employing her child in the family business.

A business paying its owner a $30,000 salary.

A taxpayer investing in a tax-preferred investment.

None of the choices are correct.

1. Which of the following does not limit the income-shifting strategy?

Assignment of income doctrine

Business purpose doctrine

Substance-over-form doctrine

Step-transaction doctrine

None of the choices are correct.

1. A taxpayer paying his 10-year-old daughter $50,000 a year for consulting likely violates which doctrine?

Constructive receipt doctrine

Implicit tax doctrine

Substance-over-form doctrine

Step-transaction doctrine

None of the choices are correct.

1. A taxpayer instructing her son to collect rent checks for the taxpayer's property and to report this as taxable income on the son's tax return violates which doctrine?

Constructive receipt doctrine

Implicit tax doctrine

Assignment of income doctrine

Step-transaction doctrine

None of the choices are correct.

1. Which of the following is needed to implement the income-shifting strategy?

Taxpayers with varying tax rates

Decreasing tax rates

Increasing tax rates

Unrelated taxpayers

None of the choices are correct.

1. A common income-shifting strategy is to:

shift income from low tax rate taxpayers to high tax rate taxpayers.

shift deductions from low tax rate taxpayers to high tax rate taxpayers.

shift deductions from high tax rate taxpayers to low tax rate taxpayers.

accelerate tax deductions.

None of the choices are correct.

1. Jason's employer pays year-end bonuses each year on December 31. Jason, a cash-basis taxpayer, would prefer not to pay tax on his bonus this year (and actually would prefer his daughter to pay tax on the bonus). So, he leaves town on December 31, 2022, and has his daughter, Julie, pick up his check on January 2, 2023. Who reports the income and when?

Julie in 2023

Julie in 2022

Jason in 2022

Jason in 2023

None of the choices are correct.

1. Which of the following is more likely to receive IRS scrutiny under the assignment of income doctrine?

A corporation paying its shareholders a $20,000 dividend.

A parent employing her child in the family business.

A taxpayer gifting stock to his children.

A cash-basis business delaying billing its customers until after year-end.

None of the choices are correct.

1. Which of the following is an example of the income-shifting strategy?

A corporation paying its shareholders a $20,000 dividend.

A corporation paying its owner a $20,000 salary.

A high tax rate taxpayer investing in tax-exempt municipal bonds.

A cash-basis business delaying billing its customers until after year-end.

None of the choices are correct.

1. Which of the following is an example of the conversion strategy?

A corporation paying its shareholders a $20,000 dividend.

A corporation paying its owner a $20,000 salary.

A high tax rate taxpayer investing in tax exempt municipal bonds.

A cash-basis business delaying billing its customers until after year end.

None of the choices are correct.

1. Which of the following may limit the conversion strategy?

Implicit taxes

Assignment of income doctrine

Constructive receipt doctrine

Activities with preferential tax rates

None of the choices are correct.

1. Assume that Bill's marginal tax rate is 32 percent. If corporate bonds pay 8 percent interest, what interest rate would a municipal bond have to offer for Bill to be indifferent between the two bonds?

32.00 percent

10.40 percent

8.00 percent

7.00 percent

None of the choices are correct.

1. Assume that Bill's marginal tax rate is 32 percent. If corporate bonds pay 7 percent interest, what interest rate would a municipal bond have to offer for Bill to be indifferent between the two bonds?  
   **Note: Do not round your final answer.**

32.00 percent

9.10 percent

7.00 percent

6.00 percent

4.76 percent

1. Assume that John's marginal tax rate is 37 percent. If a city of Austin bond pays 6 percent interest, what interest rate would a corporate bond have to offer for John to be indifferent between the two bonds?

37.00 percent

9.52 percent

6.00 percent

3.78 percent

None of the choices are correct.

1. Assume that John's marginal tax rate is 37 percent. If a city of Austin bond pays 10.5 percent interest, what interest rate would a corporate bond have to offer for John to be indifferent between the two bonds?

64.75 percent

16.67 percent

10.50 percent

6.62 percent

None of the choices are correct.

1. Assume that Larry's marginal tax rate is 24 percent. If corporate bonds pay 10 percent interest, what interest rate would a municipal bond have to offer for Larry to be indifferent between the two bonds?

24.00 percent

12.00 percent

10.00 percent

7.60 percent

None of the choices are correct.

1. Assume that Larry's marginal tax rate is 24 percent. If corporate bonds pay 8.8 percent interest, what interest rate would a municipal bond have to offer for Larry to be indifferent between the two bonds?

24.00 percent

10.51 percent

8.80 percent

6.69 percent

None of the choices are correct.

1. Assume that Lavonia's marginal tax rate is 22 percent. If a city of Tampa bond pays 5 percent interest, what interest rate would a corporate bond have to offer for Lavonia to be indifferent between the two bonds?

22 percent

5 percent

7 percent

3.9 percent

None of the choices are correct.

1. Assume that Lavonia's marginal tax rate is 22 percent. If a city of Tampa bond pays 6.8 percent interest, what interest rate would a corporate bond have to offer for Lavonia to be indifferent between the two bonds?

22.00 percent

6.80 percent

8.80 percent

5.70 percent

8.72 percent

1. Assume that Marsha is indifferent between investing in a city of Destin bond that pays 6 percent interest and a corporate bond that pays 8 percent interest. What is Marsha's marginal tax rate?

50 percent

40 percent

30 percent

20 percent

None of the choices are correct.

1. Assume that Marsha is indifferent between investing in a city of Destin bond that pays 3.35 percent interest and a corporate bond that pays 5.85 percent interest. What is Marsha's marginal tax rate?  
   **Note: Do not round intermediate computations.**

85.48 percent

57.74 percent

47.74 percent

28.87 percent

None of the choices are correct.

1. Assume that Javier is indifferent between investing in a city of El Paso bond that pays 5 percent interest and a corporate bond that pays 6.25 percent interest. What is Javier's marginal tax rate?

50 percent

40 percent

30 percent

20 percent

None of the choices are correct.

1. Assume that Javier is indifferent between investing in a city of El Paso bond that pays 4.1 percent interest and a corporate bond that pays 5.7 percent interest. What is Javier's marginal tax rate?

78.04 percent

48.07 percent

38.07 percent

28.07 percent

None of the choices are correct.

1. Assume that Lucas's marginal tax rate is 32 percent and his tax rate on dividends is 15 percent. If a dividend-paying stock (with no growth potential) pays an 8 percent dividend yield, what interest rate would a municipal bond have to offer for Lucas to be indifferent between the two investments from a cash-flow perspective?

32.00 percent

15.00 percent

8.00 percent

6.80 percent

None of the choices are correct.

1. Assume that Lucas's marginal tax rate is 42 percent and his tax rate on dividends is 21 percent. If a dividend-paying stock (with no growth potential) pays an 9.8 percent dividend yield, what interest rate would a municipal bond have to offer for Lucas to be indifferent between the two investments from a cash-flow perspective?

42.00 percent

20.00 percent

9.80 percent

7.74 percent

None of the choices are correct.

1. Assume that Keisha's marginal tax rate is 37 percent and her tax rate on dividends is 15 percent. If a city of Atlanta bond pays 7.65 percent interest, what dividend yield would a dividend-paying stock (with no growth potential) have to offer for Keisha to be indifferent between the two investments from a cash-flow perspective?

15.00 percent

10.00 percent

9.00 percent

7.65 percent

None of the choices are correct.

1. Assume that Keisha's marginal tax rate is 37 percent and her tax rate on dividends is 10 percent. If a city of Atlanta bond pays 7.02 percent interest, what dividend yield would a dividend-paying stock (with no growth potential) have to offer for Keisha to be indifferent between the two investments from a cash-flow perspective?

10.00 percent

8.80 percent

7.80 percent

7.02 percent

None of the choices are correct.

1. Assume that Shavonne's marginal tax rate is 37 percent and her tax rate on dividends is 15 percent. If a corporate bond pays 10.20 percent interest, what dividend yield would a dividend-paying stock (with no growth potential) have to offer for Shavonne to be indifferent between the two investments from a cash-flow perspective?

6.43 percent

7.56 percent

10.20 percent

15.00 percent

None of the choices are correct.

1. Assume that Shavonne's marginal tax rate is 37 percent and her tax rate on dividends is 15 percent. If a corporate bond pays 9.8 percent interest, what dividend yield would a dividend-paying stock (with no growth potential) have to offer for Shavonne to be indifferent between the two investments from a cash-flow perspective?

6.13 percent

7.26 percent

9.80 percent

15.00 percent

None of the choices are correct.

1. Assume that Will's marginal tax rate is 32 percent and his tax rate on dividends is 15 percent. If a dividend-paying stock (with no growth potential) pays a dividend yield of 8 percent, what interest rate must the corporate bond offer for Will to be indifferent between the two investments from a cash-flow perspective?

12 percent

11 percent

10 percent

8 percent

None of the choices are correct.

1. Assume that Will's marginal tax rate is 20 percent and his tax rate on dividends is 15 percent. If a dividend-paying stock (with no growth potential) pays a dividend yield of 7.4 percent, what interest rate must the corporate bond offer for Will to be indifferent between the two investments from a cash-flow perspective?

9.99 percent

9.12 percent

7.86 percent

5.47 percent

None of the choices are correct.

1. Assume that Jose is indifferent between investing in a corporate bond that pays 10 percent interest and a stock with no growth potential that pays an 8 percent dividend yield. Assume that the tax rate on dividends is 15 percent. What is Jose's marginal tax rate?

47 percent

37 percent

32 percent

15 percent

None of the choices are correct.

1. Assume that Jose is indifferent between investing in a corporate bond that pays 10 percent interest and a stock with no growth potential that pays an 8.4 percent dividend yield. Assume that the tax rate on dividends is 15 percent. What is Jose's marginal tax rate?  
   **Note: Do not round intermediate computations.**

43.64 percent

33.68 percent

28.60 percent

11.48 percent

None of the choices are correct.

1. Assume that Juanita is indifferent between investing in a corporate bond that pays 10.20 percent interest and a stock with no growth potential that pays a 6 percent dividend yield. Assume that the tax rate on dividends is 15 percent. What is Juanita's marginal tax rate?

50 percent

40 percent

30 percent

15 percent

None of the choices are correct.

1. Assume that Juanita is indifferent between investing in a corporate bond that pays 10.00 percent interest and a stock with no growth potential that pays a 7.10 percent dividend yield. Assume that the tax rate on dividends is 15 percent. What is Juanita's marginal tax rate?  
   **Note: Do not round intermediate computations.**

39.65 percent

29.54 percent

19.43 percent

9.72 percent

None of the choices are correct.

1. If Tom invests $60,000 in a taxable corporate bond that provides a 5 percent before-tax return, how much will Tom's investment be worth in either 8 or 20 years from now when the bond matures? Assume Tom's marginal tax rate is 35 percent.

$88,647; $159,198

$92,782; $178,414

$79,621; $121,716

$77,495; $113,750

None of the choices are correct.

1. If Tom invests $140,000 in a taxable corporate bond that provides a 11 percent before-tax return, how much will Tom's investment be worth in either 8 or 20 years from now when the bond matures? Assume Tom's marginal tax rate is 35 percent.

$322,635; $1,128,724

$258,544; $621,813

$245,383; $565,115

$243,257; $557,149

None of the choices are correct.

1. The income-shifting and timing strategies are examples of:

tax avoidance.

tax evasion.

illegal taxpayer strategies.

All of the choices are correct.

None of the choices are correct.

1. A taxpayer earning income in "cash" and not reporting it as taxable income is an example of:

tax avoidance.

tax evasion.

conversion.

income shifting.

None of the choices are correct.

1. Investing in municipal bonds to avoid paying tax on interest earned and to earn a higher after-tax yield is an example of:

conversion.

tax evasion.

timing.

income shifting.

None of the choices are correct.

1. Paying "fabricated" expenses in high tax rate years is an example of:

conversion.

tax evasion.

timing.

income shifting.

None of the choices are correct.

**ESSAY. Write your answer in the space provided or on a separate sheet of paper.**

1. The following are a series of tables that may be referred to in several questions throughout your test. Please refer to these tables as needed or as directed.  
   **EXHIBIT 3-1 Present Value of a Single Payment at Various Annual Rates of Return**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **4%** | **5%** | **6%** | **7%** | **8%** | **9%** | **10%** | **11%** | **12%** |
| **Year 1** | .962 | .952 | .943 | .935 | .926 | .917 | .909 | .901 | .893 |
| **Year 2** | .925 | .907 | .890 | .873 | .857 | .842 | .826 | .812 | .797 |
| **Year 3** | .889 | .864 | .840 | .816 | .794 | .772 | .751 | .731 | .712 |
| **Year 4** | .855 | .823 | .792 | .763 | .735 | .708 | .683 | .659 | .636 |
| **Year 5** | .822 | .784 | .747 | .713 | .681 | .650 | .621 | .593 | .567 |
| **Year 6** | .790 | .746 | .705 | .666 | .630 | .596 | .564 | .535 | .507 |
| **Year 7** | .760 | .711 | .665 | .623 | .583 | .547 | .513 | .482 | .452 |
| **Year 8** | .731 | .677 | .627 | .582 | .540 | .502 | .467 | .434 | .404 |
| **Year 9** | .703 | .645 | .592 | .544 | .500 | .460 | .424 | .391 | .361 |
| **Year 10** | .676 | .614 | .558 | .508 | .463 | .422 | .386 | .352 | .322 |
| **Year 11** | .650 | .585 | .527 | .475 | .429 | .388 | .350 | .317 | .287 |
| **Year 12** | .625 | .557 | .497 | .444 | .397 | .356 | .319 | .286 | .257 |
| **Year 13** | .601 | .530 | .469 | .415 | .368 | .326 | .290 | .258 | .229 |
| **Year 14** | .577 | .505 | .442 | .388 | .340 | .299 | .263 | .232 | .205 |
| **Year 15** | .555 | .481 | .417 | .362 | .315 | .275 | .239 | .209 | .183 |

**FUTURE VALUE OF $1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Rate per annum** | | | | | | | | | | | | |
| **Year** | **1%** | **2%** | **3%** | **4%** | **5%** | **6%** | **7%** | **8%** | **9%** | **10%** | **11%** | **12%** |
| **1** | 1.0100 | 1.0200 | 1.0300 | 1.0400 | 1.0500 | 1.0600 | 1.0700 | 1.0800 | 1.0900 | 1.1000 | 1.1100 | 1.1200 |
| **2** | 2.0100 | 1.0404 | 1.0609 | 1.0816 | 1.1025 | 1.1236 | 1.1449 | 1.1664 | 1.1881 | 1.2100 | 1.2321 | 1.2544 |
| **3** | 3.0100 | 1.0612 | 1.0927 | 1.1249 | 1.1576 | 1.1910 | 1.2250 | 1.2597 | 1.2950 | 1.3310 | 1.3676 | 1.4049 |
| **4** | 4.0100 | 1.0824 | 1.1255 | 1.1699 | 1.2155 | 1.2625 | 1.3108 | 1.3605 | 1.4116 | 1.4641 | 1.5181 | 1.5735 |
| **5** | 5.0100 | 1.1041 | 1.1593 | 1.2167 | 1.2763 | 1.3382 | 1.4026 | 1.4693 | 1.5386 | 1.6105 | 1.6851 | 1.7623 |
| **6** | 6.0100 | 1.1262 | 1.1941 | 1.2653 | 1.3401 | 1.4185 | 1.5007 | 1.5869 | 1.6771 | 1.7716 | 1.8704 | 1.9738 |
| **7** | 7.0100 | 1.1487 | 1.2299 | 1.3159 | 1.4071 | 1.5036 | 1.6058 | 1.7138 | 1.8280 | 1.9487 | 2.0762 | 2.2107 |
| **8** | 8.0100 | 1.1717 | 1.2668 | 1.3686 | 1.4775 | 1.5938 | 1.7182 | 1.8509 | 1.9926 | 2.1436 | 2.3045 | 2.4760 |
| **9** | 9.0100 | 1.1951 | 1.3048 | 1.4233 | 1.5513 | 1.6895 | 1.8385 | 1.9990 | 2.1719 | 2.3579 | 2.5580 | 2.7731 |
| **10** | 10.0100 | 1.2190 | 1.3439 | 1.4802 | 1.6289 | 1.7908 | 1.9672 | 2.1589 | 2.3674 | 2.5937 | 2.8394 | 3.1058 |
| **11** | 11.0100 | 1.2434 | 1.3842 | 1.5395 | 1.7103 | 1.8983 | 2.1049 | 2.3316 | 2.5804 | 2.8531 | 3.1518 | 3.4785 |
| **12** | 12.0100 | 1.2682 | 1.4258 | 1.6010 | 1.7959 | 2.0122 | 2.2522 | 2.5182 | 2.8127 | 3.1384 | 3.4985 | 3.8960 |
| **13** | 13.0100 | 1.2936 | 1.4685 | 1.6651 | 1.8856 | 2.1329 | 2.4098 | 2.7196 | 3.0658 | 3.4523 | 3.8833 | 4.3635 |
| **14** | 14.0100 | 1.3195 | 1.5126 | 1.7317 | 1.9799 | 2.2609 | 2.5785 | 2.9372 | 3.3417 | 3.7975 | 4.3104 | 4.8871 |
| **15** | 15.0100 | 1.3459 | 1.5580 | 1.8009 | 2.0789 | 2.3966 | 2.7590 | 3.1722 | 3.6425 | 4.1772 | 4.7846 | 5.4736 |
| **16** | 16.0100 | 1.3728 | 1.6047 | 1.8730 | 2.1829 | 2.5404 | 2.9522 | 3.4259 | 3.9703 | 4.5950 | 5.3109 | 6.1304 |
| **17** | 17.0100 | 1.4002 | 1.6528 | 1.9479 | 2.2920 | 2.6928 | 3.1588 | 3.7000 | 4.3276 | 5.0545 | 5.8951 | 6.8660 |
| **18** | 18.0100 | 1.4282 | 1.7024 | 2.0258 | 2.4066 | 2.8543 | 3.3799 | 3.9960 | 4.7171 | 5.5599 | 6.5436 | 7.6900 |
| **19** | 19.0100 | 1.4568 | 1.7535 | 2.1068 | 2.5270 | 3.0256 | 3.6165 | 4.3157 | 5.1417 | 6.1159 | 7.2633 | 8.6128 |
| **20** | 20.0100 | 1.4859 | 1.8061 | 2.1911 | 2.6533 | 3.2071 | 3.8697 | 4.6610 | 5.6044 | 6.7275 | 8.0623 | 9.6463 |

**2023 Tax Rate Schedules**  
**Individuals**  
**Schedule X-Single**

|  |  |  |
| --- | --- | --- |
| **If taxable income is over:** | **But not over:** | **The tax is:** |
| $ 0 | $ 11,000 | 10% of taxable income |
| $ 11,000 | $ 44,725 | $1,100 plus 12% of the excess over $11,000 |
| $ 44,725 | $ 95,375 | $5,147 plus 22% of the excess over $44,725 |
| $ 95,375 | $ 182,100 | $16,290 plus 24% of the excess over $95,375 |
| $ 182,100 | $ 231,250 | $37,104 plus 32% of the excess over $182,100 |
| $ 231,250 | $ 578,125 | $52,832 plus 35% of the excess over $231,250 |
| $ 578,125 | — | $174,238.25 plus 37% of the excess over $578,125 |

**Schedule Y-1-Married Filing Jointly or Qualifying Widow(er)**

|  |  |  |
| --- | --- | --- |
| **If taxable income is over:** | **But not over:** | **The tax is:** |
| $ 0 | $ 22,000 | 10% of taxable income |
| $ 22,000 | $ 89,450 | $2,200 plus 12% of the excess over $22,000 |
| $ 89,450 | $ 190,750 | $10,294 plus 22% of the excess over $89,450 |
| $ 190,750 | $ 364,200 | $32,580 plus 24% of the excess over $190,750 |
| $ 364,200 | $ 462,500 | $74,208 plus 32% of the excess over $364,200 |
| $ 462,500 | $ 693,750 | $105,664 plus 35% of the excess over $462,500 |
| $ 693,750 | — | $186,601.50 plus 37% of the excess over $693,750 |

**Schedule Z-Head of Household**

|  |  |  |
| --- | --- | --- |
| **If taxable income is over:** | **But not over:** | **The tax is:** |
| $ 0 | $ 15,700 | 10% of taxable income |
| $ 15,700 | $ 59,850 | $1,570 plus 12% of the excess over $15,700 |
| $ 59,850 | $ 95,350 | $6,868 plus 22% of the excess over $59,850 |
| $ 95,350 | $ 182,100 | $14,678 plus 24% of the excess over $95,350 |
| $ 182,100 | $ 231,250 | $35,498 plus 32% of the excess over $182,100 |
| $ 231,250 | $ 578,100 | $51,226 plus 35% of the excess over $231,250 |
| $ 578,100 | — | $172,623.50 plus 37% of the excess over $578,100 |

**Schedule Y-2-Married Filing Separately**

|  |  |  |
| --- | --- | --- |
| **If taxable income is over:** | **But not over:** | **The tax is:** |
| $ 0 | $ 11,000 | 10% of taxable income |
| $ 11,000 | $ 44,725 | $1,100 plus 12% of the excess over $11,000 |
| $ 44,725 | $ 95,375 | $5,147 plus 22% of the excess over $44,725 |
| $ 95,375 | $ 182,100 | $16,290 plus 24% of the excess over $95,375 |
| $ 182,100 | $ 231,250 | $37,104 plus 32% of the excess over $182,100 |
| $ 231,250 | $ 346,875 | $52,832 plus 35% of the excess over $231,250 |
| $ 346,875 | — | $93,300.75 plus 37% of the excess over $346,875 |

1. Danny argues that tax accountants suffer from one-mindedness in their attempts at tax planning (i.e., reducing taxes at all costs). Is Danny's view of tax planning correct—i.e., does he understand what the goal of tax planning is? Please elaborate.

1. An astute tax student once summarized that many of the tax planning strategies merely make use of the variation of taxation across different dimensions. Explain why this is true. Be specific.

1. There are two basic timing-related tax rate strategies. What are they? What is the intent of each strategy? In which situations do the tax rate and timing strategies provide conflicting recommendations? What information do you need to determine the appropriate action?

1. Based only on the information provided for each scenario, determine whether Eddy or Scott will benefit more from using the timing strategy and why there will be a benefit to that person. Use Exhibit 3.1.
   * + - 1. Eddy has a 40 percent tax rate. Scott has a 30 percent tax rate.
         2. Eddy and Scott each have a 40 percent tax rate. Eddy has $10,000 of income that could be deferred; Scott has $20,000 of income that could be shifted.
         3. Eddy and Scott each have a 40 percent tax rate and $20,000 of income that could be deferred. Eddy's after-tax rate of return is 8 percent. Scott's after-tax rate of return is 10 percent.
         4. Eddy and Scott each have a 40 percent tax rate, $20,000 of income that could be deferred, and an after-tax rate of return of 10 percent. Eddy can defer income up to three years. Scott can defer income up to two years.

1. Based only on the information provided for each scenario, determine whether Kristi or Cindy will benefit more from using the timing strategy and why there will be a benefit to that person. Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**
   * + - 1. Kristi has a 40 percent tax rate and can defer $20,000 of income. Cindy has a 30 percent tax rate and can defer $30,000 of income.
         2. Kristy has a 30 percent tax rate and a 10 percent after-tax rate of return and can defer $25,000 of income for three years. Cindy has a 40 percent tax rate and an 8 percent after-tax rate of return and can defer $20,000 of income for four years.

1. Based only on the information provided for each scenario, determine whether Kristi or Cindy will benefit more from using the timing strategy and why there will be a benefit to that person. Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**
   * + - 1. Kristi has a 40 percent tax rate and can defer $32,000 of income. Cindy has a 30 percent tax rate and can defer $42,000 of income.
         2. Kristy has a 30 percent tax rate and a 9 percent after-tax rate of return and can defer $37,000 of income for three years. Cindy has a 40 percent tax rate and an 7 percent after-tax rate of return and can defer $32,000 of income for four years.

1. David, an attorney and cash-basis taxpayer, is new to the concept of tax planning and recently learned of the timing strategy. To implement the timing strategy, David plans to establish a new policy that allows his clients to wait up to five years to pay their attorney fees. Assume that David expects his marginal tax rates to remain constant over the foreseeable future. What is wrong with this strategy?

1. Explain why $1 today is not equal to $1 in the future. Why is understanding this concept particularly important for tax planning? What tax strategy exploits this concept?

1. Luther was very excited to hear about the potential tax savings from shifting income from his corporation to himself. The next day he had his corporation declare a $30,000 dividend to him. Is this an effective income-shifting strategy? If so, why? If not, why not? What recommendations do you have for Luther?

1. Compare and contrast the constructive receipt doctrine and the assignment of income doctrine.   
   In what situations do these doctrines apply? What tax planning strategies does each doctrine limit?

1. Lucinda is contemplating a long-range planning strategy that will allow her to defer sizable portions of her income for 10 years. What type of planning strategy is she contemplating? What are some potential risks associated with this type of strategy?

1. Jared, a tax novice, has recently learned of several foreign tax havens (i.e., countries with low tax rates). He is considering locating his manufacturing operations in one of these countries solely based on their low tax rates. What types of taxes is Jared ignoring? Explain how these other taxes may affect the viability of Jared's choice to locate in a foreign tax haven.

1. Richard recently received $10,000 of compensation for some consulting work (paid in cash). Jeffrey recently received $10,000 of interest income from city of Dallas bonds. Both taxpayers report no taxable income from these transactions. Is this considered tax avoidance or tax evasion? What is the difference, if any, between the two?

1. Antonella works for a company that pays a year-end bonus in December of each year. Assume that Antonella expects to receive a $20,000 bonus in December this year, her tax rate is 30 percent, and her after-tax rate of return is 8 percent. If Antonella's employer paid her bonus on January 1 of next year instead of in December, how much would this action save Antonella in today's tax dollars? If Antonella's tax rate increased to 32 percent next year, would receiving the bonus in January still be advantageous? Use Exhibit 3.1.

1. Joe Harry, a cash-basis taxpayer, owes $20,000 in tax-deductible accounting fees for his business. Assume that it is December 28th and that Joe Harry can avoid any finance charges if he pays the accounting fees by January 10th. Joe Harry's tax rate this year is 24 percent. His tax rate next year will be 32 percent. His after-tax rate of return is 8 percent. When should Joe Harry pay the $20,000 fees and why? UseExhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

1. Joe Harry, a cash-basis taxpayer, owes $31,000 in tax-deductible accounting fees for his business. Assume that it is December 28thDecember 28th and that Joe Harry can avoid any finance charges if he pays the accounting fees by January 10thJanuary 10th. Joe Harry's tax rate this year is 24 percent. His tax rate next year will be 32 percent. His after-tax rate of return is 6 percent. When should Joe Harry pay the $31,000 fees and why? UseExhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

1. Rodney, a cash-basis taxpayer, owes $40,000 in tax-deductible consulting fees for his business. Assume that it is December 28th and that Rodney can avoid any finance charges if he pays the accounting fees by January 10th. Rodney's tax rate this year is 32 percent and his after-tax rate of return is 10 percent. What tax rate next year will make Rodney indifferent between paying the $40,000 this year or next year? UseExhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

1. Rodney, a cash-basis taxpayer, owes $50,000 in tax-deductible consulting fees for his business. Assume that it is December 28thDecember 28th and that Rodney can avoid any finance charges if he pays the accounting fees by January 10thJanuary 10th. Rodney's tax rate this year is 32 percent and his after-tax rate of return is 6.5 percent. What tax rate next year will make Rodney indifferent between paying the $50,000 this year or next year? UseExhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

1. Troy is not a very astute investor. He has a knack for investing in losing stocks. In his latest investment move, he has realized a loss of about $40,000 (original basis of $50,000; current fair market value of $10,000) in High Tech, Incorporated The good news is that unlike prior years, he actually has $45,000 of gains that he can use to offset the loss. Troy is considering either selling the High Tech, Incorporated stock to his sister, Louise, or on the stock market. Which should he choose and why? Please explain why the IRS may treat the two transactions differently.

1. O'Reilly is a masterful lottery player. The megamillion jackpot is now up to $200 million. If O'Reilly wins the jackpot, he has a choice of receiving $200 million in five years or a smaller lump sum now. Advise O'Reilly on his choice under the following scenarios. Which option should he take and why? Use Exhibit 3.1.
   * + - 1. O'Reilly's after-tax return is 10 percent. If he chooses the current lump-sum option, the lottery will pay him $130 million.
         2. O'Reilly's after-tax return is 10 percent. His current tax rate will be 35 percent if he receives the lottery payment now. His expected tax rate in five years will be 40 percent. If he chooses the current lump-sum option, the lottery will pay him $100 million.

1. Sal, a calendar-year taxpayer, uses the cash-basis method of accounting for his sole proprietorship. In late December, he performed $40,000 of consulting services for a client. Sal typically requires his clients to pay his bills immediately upon receipt. Assume that Sal's marginal tax rate is 32 percent this year and 37 percent next year and that he can earn an after-tax rate of return of 12 percent on his investments. Should Sal send his client the bill in December or January? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

1. Sal, a calendar-year taxpayer, uses the cash-basis method of accounting for his sole proprietorship. In late December, he performed $40,000 of consulting services for a client. Sal typically requires his clients to pay his bills immediately upon receipt. Assume that Sal's marginal tax rate is 32 percent this year and 37 percent next year and that he can earn an after-tax rate of return of 9 percent on his investments. Should Sal send his client the bill in December or January? Use Exhibit 3.1.  
   **Note: Round discount factor(s) to three decimal places.**

1. Lucky owns a maid service that cleans several local businesses nightly. Lucky, a high tax rate taxpayer, would like to shift some income to his son Rocco. Lucky tells all of his customers (who are always timely in their payments) to pay Rocco, and then Rocco will report 50 percent of the income as a collection fee. Lucky will report the remaining 50 percent. Will this shift the income from Lucky to Rocco? Why or why not? What doctrines influence your answer? Any suggestions for Lucky?

1. Bono owns and operates a sole proprietorship and has a 32 percent marginal tax rate. He provides his son, Richie, $12,000 a year for college expenses. Richie works as a street musician and has a marginal tax rate of 15 percent. What could Bono do to reduce his family tax burden? How much pretax income does it currently take Bono to generate the $12,000 after taxes given to Richie? If Richie worked for his father's sole proprietorship, what salary would Bono have to pay him to generate $12,000 after taxes? (Ignore any Social Security, Medicare, or self-employment tax issues.) How much money would this strategy save?

1. Bono owns and operates a sole proprietorship and has a 32 percent marginal tax rate. He provides his son, Richie, $20,000 a year for college expenses. Richie works as a street musician and has a marginal tax rate of 15 percent. What could Bono do to reduce his family tax burden? How much pretax income does it currently take Bono to generate the $20,000 after taxes given to Richie? If Richie worked for his father's sole proprietorship, what salary would Bono have to pay him to generate $20,000 after taxes? (Ignore any Social Security, Medicare, or self-employment tax issues.) How much money would this strategy save?

1. Jayzee is a single taxpayer who operates a sole proprietorship. He expects his taxable income next year to be $150,000, of which $125,000 is attributed to his sole proprietorship. Jayzee is contemplating incorporating his sole proprietorship. Using the 2023 single individual tax brackets and the corporate tax brackets, how much current tax could this strategy save Jayzee? (Ignore any Social Security, Medicare, or self-employment tax issues.) How much income should be retained in the corporation? (Use tax rate schedule)

1. Bobby and Whitney are husband and wife, and Whitney operates a sole proprietorship. They expect their joint taxable income next year to be $225,000, of which $175,000 is attributed to the sole proprietorship. Whitney is contemplating incorporating the sole proprietorship. Using the 2023 married filing jointly tax brackets and the corporate tax brackets, how much current tax could this strategy save Bobby and Whitney? How much income should be retained in the corporation? (Use tax rate schedule.)

1. Rob is currently considering investing in municipal bonds that earn 4 percent interest or taxable bonds issued by Dell Computer that pay 6.5 percent. If Rob's tax rate is 20 percent, which bond should he choose? Which bond should he choose if his tax rate is 30 percent? At what tax rate would he be indifferent to the municipal bond or to the corporate bond? What strategy is this decision based upon?

1. Maurice is currently considering investing in a high dividend yield stock with no growth potential that pays a 6 percent dividend yield or bonds issued by the Coca-Cola Company that pay 8 percent. If Maurice's ordinary tax rate is 25 percent and his dividend tax rate is 15 percent, which investment should he choose? Which investment should he choose if his ordinary tax rate is 30 percent? At what ordinary tax rate would he be indifferent between the stock and the bond? What strategy is this decision based upon?

1. Susan Brown has decided that she would like to go back to school after her kids leave home in five years. To save for her education, Susan would like to invest $25,000 in an investment that provides a high return. If her marginal tax rate is 35 percent, what is Susan's after-tax rate of return for the following investment options? Qualified dividends are taxed at 15 percent.

Corporate bond issued at face value with 10 percent stated interest rate payable annually.

Dividend-paying stock with an annual qualifying dividend equal to 10 percent of her investment.

Growth stock with an annual growth rate of 8 percent and no dividends paid. Note: Round your intermediate calculations to the nearest whole number.

1. Susan Brown has decided that she would like to go back to school after her kids leave home in five years. To save for her education, Susan would like to invest $19,000 in an investment that provides a high return. If her marginal tax rate is 35 percent, what is Susan's after-tax rate of return for the following investment options? Qualified dividends are taxed at 15 percent.

Corporate bond issued at face value with 20 percent stated interest rate payable annually.

Dividend-paying stock with an annual qualifying dividend equal to 8 percent of her investment.

Growth stock with an annual growth rate of 6.8 percent and no dividends paid. Note: Round your intermediate calculations to the nearest whole number.

1. Boeing is considering opening a plant in one of two neighboring states. One state has a corporate tax rate of 15 percent. If operated in this state, the plant is expected to generate $1,200,000 pretax profit. The other state has a corporate tax rate of 5 percent. If operated in this state, the plant is expected to generate $1,085,000 of pretax profit. Which state should Boeing choose based upon tax considerations only? Why do you think the plant in the state with a lower tax rate would produce a lower pretax income?

**Answer Key**Test name: ch3

FALSE

The goal of tax planning is maximizing after-tax wealth and achieving the taxpayer's nontax goals.

FALSE

TRUE

Virtually every transaction involves the taxpayer, the other transacting party, and the government.

FALSE

The timing strategy is based upon *when* income is taxed as opposed to where it is taxed.

TRUE

TRUE

TRUE

1 ÷ (1 + 0.10) = 0.909 PV. $100 × 0.909 = $90.90 versus $85.

TRUE

TRUE

FALSE

Future Value = Present Value × (1 + r)n

TRUE

FALSE

TRUE

FALSE

Deferring income is an example of the timing strategy.

TRUE

FALSE

TRUE

TRUE

TRUE

FALSE

TRUE

FALSE

TRUE

FALSE

FALSE

TRUE

FALSE

The assignment of income doctrine requires income to be taxed to the taxpayer who actually earns it.

TRUE

FALSE

Because corporations don't get a deduction for dividends paid, paying dividends is *not* an effective way to shift income.

TRUE

TRUE

TRUE

FALSE

Investors must consider implicit as well as explicit taxes.

TRUE

TRUE

Tax avoidance is legal; tax evasion is not.

FALSE

FALSE

C

E

D

A

B

C

$10,000 × 0.826 (discount factor, two years, 10 percent) = $8,260.

C

$15,000 × 0.842 (discount factor, two years, 9 percent) = $12,630.

D

$8,000 × 0.792 (discount factor, four years, 6 percent) = $6,336.

D

$14,000 × 0.735 (discount factor, four years, 8 percent) = $10,290.

E

$20,000 × (1.08)5(1.08) to the power of 5 = $29,387 or $20,000 × 1.4693 = $29,387.

E

$5,000 × (1.06)5 = $6,691 or $5,000 × 1.3382 = $6,691.

D

$15,000 × (1.12)2(1.12) to the power of 2 = $18,816 or $15,000 × 1.25440 = $18,816.

D

$30,000 × 0.25 (tax rate) × 0.792 (discount factor, 6 percent, four years) = $5,940.

E

Time horizon doesn't affect after-tax rate of return on investments taxed annually.

B

$40,000 × 0.32 (tax rate) × 0.826 (discount factor, 10 percent, two years) = $10,573.

B

$58,000 × 0.32 (tax rate) × 0.797 (discount factor, 12 percent, two years) = $14,792.

D

$50,000 × 0.37 (tax rate) × 0.747 (discount factor, 6 percent, five years) = $13,820.

D

$81,500 × 0.37 (tax rate) × 0.65 (discount factor, 9 percent, five years) = $19,601.

A

$25,000 × 0.22 (tax rate) × 0.751 (discount factor, 10 percent, three years) = $4,131.

A

$40,000 × 0.22 (tax rate) × 0.84 (discount factor, 6 percent, three years) = $7,392.

C

B

E

B

B

C

C

D

D

D

A

E

C

C

A

B

C

B

B

C

A

E

8% × (1 − 0.32) = 5.44%.

E

7% × (1 − 0.32) = 4.76%.

B

6% ÷ (1 − 0.37) = 9.52%.

B

10.5% ÷ (1 − 0.37) = 16.67%.

D

10% × (1 − 0.24) = 7.60%.

D

8.80% × (1 − 0.24) = 6.69%.

E

5% ÷ (1 − 0.22) = 6.41%.

E

6.80% ÷ (1 − 0.22) = 8.72%.

E

8% × (1 − marginal tax rate) = 6%; marginal tax rate = 1 − (6% ÷ 8%) = 25%.

E

5.85% × (1 − marginal tax rate) = 3.35%; marginal tax rate = 1 − (3.35% ÷ 5.85%) = 42.74%.

D

6.25% × (1 − marginal tax rate) = 5%; marginal tax rate = 1 − (5% ÷ 6.25%) = 20%.

D

5.7% × (1 − marginal tax rate) = 4.1%; marginal tax rate = 1 − (4.1% ÷ 5.7%) = 28.07%.

D

8% × (1 − 0.15) = 6.80%.

D

9.8% × (1 − 0.21) = 7.74%.

C

Dividend yield × (1 − 0.15) = 7.65%; Dividend yield = 7.65% ÷ (1 − 0.15) = 9.00%.

C

Dividend yield × (1 − 0.10) = 7.02%; Dividend yield = 7.02% ÷ (1 − 0.10) = 7.80%.

B

After-tax yield of the corporate bond is 10.20% × (1 − 0.37) = 6.43%. The after-tax yield of the dividend-paying stock must be 6.43 percent. Therefore, 6.43% = Yield × (1 − 0.15) and Yield = 7.56%.

B

After-tax yield of the corporate bond is 9.8% × (1 − 0.37) = 6.17%; The after-tax yield of the dividend-paying stock must be 6.17 percent. Therefore, 6.17% = Yield × (1 − 0.15) and Yield = 7.26%.

C

After-tax yield of the dividend-paying stock is 8% × (1 − 0.15) = 6.80%. The after-tax yield of the corporate bond must be 6.80 percent. Therefore, 6.80% = Yield × (1 − 0.32) and Yield = 10%.

C

After-tax yield of the dividend-paying stock is 7.40% × (1 − 0.15) = 6.29%; The after-tax yield of the corporate bond must be 6.29 percent. Therefore, 6.29% = Yield × (1 − 0.20) and Yield = 7.86%.

C

After-tax yield of dividend-paying stock is 8% × (1 − 0.15) = 6.80%. The after-tax yield of the bond must be 6.80 percent. Therefore, 6.80% = 10% × (1 − marginal tax rate) and marginal tax rate = 32%.

C

After-tax yield of dividend-paying stock is 8.40% × (1 − 0.15) = 7.14%; The after-tax yield of the bond must be 7.14 percent. Therefore, 7.14% = 10% × (1 − marginal tax rate) and marginal tax rate = 28.60%.

A

After-tax yield of dividend-paying stock is 6% × (1 − 0.15) = 5.10%. The after-tax yield of the bond must be 5.10 percent. Therefore, 5.10% = 10.20% × (1 − marginal tax rate) and marginal tax rate = 50%.

A

After-tax yield of dividend-paying stock is 7.10% × (1 − 0.15) = 6.04%; The after-tax yield of the bond must be 6.04 percent. Therefore, 6.04% = 10.00% × (1 − marginal tax rate) and marginal tax rate = 39.65%.

D

ATRR = 0.0325 (0.05 × (1 − 0.35); $60,000 × (1.0325)8(1.0325) to the power of 8 = $77,495; $60,000 × (1.0325)20(1.0325) to the power of 20 = $113,750.

D

ATRR = 0.0715 (0.11 × (1 − 0.35)); $140,000 × (1.0715)8 = $243,257; $140,000 × (1.0715)20 = $557,149.

A

B

A

B

Essay

Essay

Danny has an incomplete view of the goals of tax planning. In general terms, the goal of tax planning is to maximize the taxpayer's after-tax wealth while simultaneously achieving the taxpayer's nontax goals. Maximizing after-tax wealth is not necessarily the same as tax minimization. Specifically, maximizing after-tax wealth requires one to consider both the tax and nontax costs and benefits of alternative transactions, whereas tax minimization focuses solely on a single cost (i.e., taxes). Indeed, if the goal of tax planning were simply to minimize taxes, the simplest way to achieve this goal would be to earn no income at all.

Essay

The three basic tax strategies discussed basically exploit the variation of taxation across different dimensions. The timing strategy exploits the variation in taxation across time—i.e., the "real" tax costs of income decrease as taxation is deferred; the "real" tax savings associated with tax deductions increase as tax deductions are accelerated. The income-shifting strategy exploits the variation in taxation across taxpayers or jurisdictions (e.g., by shifting income to low tax rate taxpayers and tax deductions to high tax rate taxpayers). Finally, the conversion strategy exploits the variation in taxation across activities.

Essay

The two basic timing-related tax rate strategies are to recognize tax deductions during high tax rate years and to recognize taxable income during low tax rate years. The intent of the deduction strategy is to increase the tax savings associated with the tax deductions. The intent of the income strategy is to decrease the tax costs associated with the income.  
The tax rate and timing strategies provide conflicting recommendations when tax rates are increasing. To determine the appropriate action, you need the taxpayer's after-tax rate of return and the amount of the tax rate increase.

Essay

* + - * 1. Eddy, because the benefits of the timing strategy increase with tax rates.
        2. Scott, because the benefits of the timing strategy increase with the magnitude of the transaction.
        3. Scott, because the benefits of the timing strategy increase with the after-tax rate of return.
        4. Eddy, because the benefits of the timing strategy increase with the deferral period.

Essay

* + - * 1. Cindy, because she can defer $9,000 of tax ($30,000 × 30%), whereas Kristi can only defer $8,000 of tax ($20,000 × 40%).
        2. Cindy. If Kristy defers the $25,000 of taxable income for three years, it will save her $1,867.50 tax in today's dollars. Current tax on $25,000 at 30 percent = $7,500 Present value of tax on $25,000 income taxed at 30 percent in three years: $25,000 × 0.30 × 0.751 (discount factor, three years, 10 percent) = $5,632.50 Kristy's savings = $7,500 − $5,632.50 = $1,867.50 If Cindy defers the $20,000 of taxable income for four years, it will save her $2,120 tax in today's dollars. Current tax on $20,000 at 40 percent = $8,000 Present value of tax on $20,000 income taxed at 40 percent in four years: $20,000 × 0.40 × 0.735 (discount factor, four years, 8 percent) = $5,880 Cindy's savings = $8,000 − $5,880 = $2,120

Essay

* + - * 1. Cindy, because she can defer $12,600 of tax ($42,000 × 30%), whereas Cindy can only defer $12,800 of tax ($32,000 × 40%).
        2. Cindy. If Kristy defers the $37,000 of taxable income for three years, it will save her $2,530.8 tax in today's dollars. Current tax on $37,000 at 30 percent = $11,100 Present value of tax on $37,000 income taxed at 30 percent in three years: $37,000 × 0.30 × 0.772 (discount factor, three years, 9 percent) = $8,569.20 Kristy's savings = $11,100 − $8,569.20 = $2,530.80 If Cindy defers the $32,000 of taxable income for four years, it will save her $3,033.6 tax in today's dollars. Current tax on $32,000 at 40 percent = $12,800 Present value of tax on $32,000 income taxed at 40 percent in four years: $32,000 × 0.40 × 0.763 (discount factor, four years, 7 percent) = $9,766.4 Cindy's savings = $12,800 − $9,766.4 = $3,033.6

Essay

While this plan defers the taxation on his fees, it also delays David's receipt of the fees. Assuming that David doesn't charge his clients any interest on their delayed payment, this plan will reduce the present value of taxes paid on the fees *and* the present value of the fees. The decrease in the present value of the fees will exceed the decrease in the present value of the tax paid on the fees. In addition, by delaying payment, David may increase the likelihood that many of his clients will not pay his fees. In sum, this is not a good plan.

Essay

Assuming an investor can earn a positive return (e.g., 5 percent), $1 invested today should be worth $1.05 in one year. Hence, $1 today is equivalent to $1.05 in one year.   
Taxes paid are cash outflows, and tax savings generated from tax deductions can be thought of as cash inflows. With this perspective, the timing of when a taxpayer pays tax on income or receives a tax deduction for an expenditure obviously affects the present value of the taxes paid (i.e., a cash outflow) or tax savings received (i.e., a cash inflow).   
The timing strategy exploits this concept.

Essay

Because corporations do not get a tax deduction for dividends paid, paying dividends is not an effective way to shift income. Instead, paying dividends results in "double taxation"—the profits generating the dividends are taxed first at the corporate level, and then the dividends are taxed at the shareholder level. Luther should attempt to shift income from the corporation to himself via methods that generate tax deductions at the corporate level (e.g., compensation to Luther, rent paid to Luther, interest paid to Luther, etc.).

Essay

The constructive receipt doctrine limits income deferral (i.e., the timing strategy) for cash-basis taxpayers. Unlike accrual-method taxpayers, cash-basis taxpayers report income for tax purposes when the income is received (in the form of cash, property, services, etc.). The cash basis affords taxpayers some leeway in timing when to recognize income because, to some extent, taxpayers can control when they receive income (e.g., by accelerating or deferring billing their clients). The constructive receipt doctrine provides that a taxpayer must recognize income when it is actually or constructively received. Constructive receipt is deemed to have occurred if the income has been credited to the taxpayer's account or if the income is unconditionally available to the taxpayer, the taxpayer is aware of the income's availability, and there are no restrictions on the taxpayer's control over the income.   
The assignment of income doctrine requires income to be taxed to the taxpayer that actually earns the income. Merely assigning income (e.g., someone's paycheck or dividend) to another taxpayer does not transfer the tax liability associated with the income. The implication of the assignment of income doctrine is that to shift income to a taxpayer, the taxpayer must actually earn the income. Thus, the assignment of income doctrine limits the income-shifting strategy. Compared to the constructive receipt doctrine, which affects when income is taxed, the assignment of income doctrine affects to whom the income is taxed.

Essay

Lucinda is contemplating a long-term timing strategy. One risk to this type of strategy is that changes in the control of the White House and Congress may result in a fundamental shift in tax policy. Tax rate changes are rather frequent, as lawmakers use them as an integral part of fiscal or economic policy initiatives (e.g., to raise revenue, stimulate the economy, etc.). The risk to Lucinda is that newly elected officials will change the tax system in a way that eliminates the benefits of her tax planning strategies (e.g., increasing tax rates in the future may reduce or eliminate the benefits of income deferral).

Essay

The concept of implicit taxes suggests that the demand for tax-advantaged activities increases the costs associated with these activities, thereby reducing the pretax returns of these activities and the advantages of the conversion strategy. For example, implicit taxes may reduce or eliminate the advantages of tax-preferred investments (e.g., municipal bonds, or investments taxed at preferential tax rates) by decreasing the pretax rate of returns for these investments. Likewise, the demand for workers, services, property, etc. in low tax rate jurisdictions (foreign country or low-tax state) may increase the costs associated with operating a business in these jurisdictions such that the tax advantages of locating in these jurisdictions are offset by nontax costs. Thus, Jared should carefully consider the implicit taxes of locating in a foreign tax haven.

Essay

Richard is engaged in tax evasion. Jeffrey is engaged in tax avoidance. Tax avoidance is the legal act of arranging one's affairs to minimize taxation. The rewards of tax avoidance include maximizing the taxpayer's wealth. It has long been endorsed by the courts and Congress. In contrast to tax avoidance, tax evasion (willful intent to defraud the government) falls outside the confines of legal tax avoidance. The "rewards" of tax evasion include civil and criminal penalties, including large monetary fines and sentencing to federal prison. In many cases, there is a clear distinction between avoidance (e.g., not paying tax on municipal bond interest) and evasion (e.g., not paying tax on $10,000 of compensation). In other cases, the line between tax avoidance and evasion is less clear. In these situations, professional judgment, the use of a "smell test," and consideration of the business purpose, step-transaction, and substance-over-form doctrines may prove useful.

Essay

If Antonella receives the $20,000 in December, she would have to pay $6,000 in tax in today's dollars. If Antonella receives the $20,000 on January 1, she would have to pay $6,000 in tax in one year. The present value of this payment is $5,556 ($6,000 × 0.926 (discount factor, one year, 8 percent)). Thus, receiving the payment on January 1 will save Antonella $444 ($6,000 − $5,556).   
If her tax rate increased to 32 percent next year, Antonella would have to pay $6,400 of tax in one year ($20,000 × 0.32). The present value of this payment is $5,926.40 ($6,400 × 0.926 (discount factor, one year, 8 percent)). Thus, receiving the payment on January 1 will save Antonella $473.60 ($6,400 − $5,926.40) and would still be advantageous.

Essay

If Joe Harry pays the $20,000 in December, the $20,000 tax deduction will save him $4,800 (i.e., $20,000 × 0.24 = $4,800).   
If Joe Harry pays the $20,000 in January, the $20,000 tax deduction will save him $6,400 on next year's tax return (i.e., assuming in one year). The $6,400 tax savings in one year has a present value of $5,926.40 ($6,400 × 0.926 (discount factor, one year, 8 percent)). Thus, Joe Harry should pay the $20,000 in January because it saves him $1,126.40 in tax in today's dollars.

Essay

If Joe Harry pays the $31,000 in December, the $31,000 tax deduction will save him $7,440 (i.e., $31,000 × 0.24 = $7,440).   
If Joe Harry pays the $31,000 in January, the $31,000 tax deduction will save him $9,920 on next year's tax return (i.e., assuming in one year). The $9,920 tax savings in one year has a present value of $9,354.56 ($9,920 × 0.943 (discount factor, one year, 6 percent)). Thus, Joe Harry should pay the $31,000 in January because it saves him $1,914.56 in tax in today's dollars.

Essay

If Rodney pays the $40,000 in December, the $40,000 tax deduction will save him $12,800 (i.e., $40,000 × 0.32 = $12,800).   
If Rodney pays the $40,000 in January, the tax savings in today's dollars is computed as:   
Tax savings = $40,000 × tax rate × 0.909 (discount factor, one year, 10 percent).   
For Rodney to be indifferent between paying the $40,000 in December or January, paying the $40,000 in January must generate $12,800 in tax savings. One can use this information to solve for next year's tax rate.   
Tax savings = $40,000 × tax rate × 0.909 (discount factor, one year, 10 percent) = $12,800   
Tax rate = ($12,800 ÷ $40,000) × (1 ÷ 0.909) = 35.20%   
Alternatively, $40,000 × 0.909 = $36,360. $36,360 × tax rate = $12,800. $12,800 ÷ $36,360 = 35.20%.

Essay

If Rodney pays the $50,000 in December, the $50,000 tax deduction will save him $16,000 (i.e., $50,000 × 0.32 = $16,000).   
If Rodney pays the $50,000 in January, the tax savings in today's dollars is computed as:  
Tax savings = $50,000 × tax rate × 0.939 (discount factor, one year, 6.5 percent).  
For Rodney to be indifferent between paying the $50,000 in December or January, paying the $50,000 in January must generate $16,000 in tax savings. One can use this information to solve for next year's tax rate.  
Tax savings = $50,000 × tax rate × 0.939 (discount factor, one year, 6.5 percent) = $16,000  
Tax rate = ($16,000 ÷ $50,000) × (1 ÷ 0.939) = 34.08%  
Alternatively, $50,000 × 0.939 = $46,950. $46,950 × tax rate = $16,000. $16,000 ÷ $46,950 = 34.08%.

Essay

If Troy sells the stock to his sister, by tax law, he will not be able to deduct the loss. Thus, he should sell the stock on the stock market. The two transactions are treated differently because the sale on the stock market is considered an arm's length transaction whereas the sale to Louise is considered a related-party transaction.   
In arm's length transactions, each transacting party negotiates for his or her own benefit. In contrast, taxpayers engaged in related-party transactions are much more willing to negotiate for the common good of the related parties and to the detriment of the IRS. Accordingly, the IRS pays special attention to related-party transactions (and even disallows losses in transactions involving related parties).

Essay

* + - * 1. If O'Reilly takes the current lump-sum option, he will receive $130 million. The $200 million received in five years will be worth $124.2 million in today's dollars (i.e., $200 million × 0.621 (discount factor, five years, 10 percent)). O'Reilly should take the $130 million today.
        2. If O'Reilly takes the current lump-sum option, he will receive $100 million before taxes and $65 million after taxes (i.e., $100 million × (1 − 0.35)). If he chooses the $200 million in five years, he will receive $120 million after taxes in five years (i.e., $200 million × (1 − 0.40)). In today's dollars, the $120 million is worth $74.52 million (i.e., $120 million × 0.621 (discount factor, five years, 10 percent)). O'Reilly should take the $200 million in five years.

Essay

Send the bill in December.   
**Option** **1**: Send $40,000 bill in December:   
$40,000 taxable income × 32% marginal tax rate = $12,800 in present value tax  
After-tax income = Pretax income − Present value tax   
= $40,000 − $12,800 = $27,200   
**Option** **2**: Send $40,000 bill in January:   
$40,000 taxable income × 37% marginal tax rate = $14,800 in tax in one year.   
Present value of tax = $14,800 × 0.893 (discount factor, one year, 12 percent) = $13,216   
After-tax income = Pretax income − Present value tax = $40,000 − $13,216 = $26,784   
Sending the $40,000 bill in December is preferred.

Essay

Send the bill in December.   
**Option** **1**: Send $40,000 bill in December:   
$40,000 taxable income × 32% marginal tax rate = $12,800 in present value tax   
After-tax income = Pretax income − Present value tax   
= $40,000 − $12,800 = $27,200   
**Option** **2**: Send $40,000 bill in January:   
$40,000 taxable income × 37% marginal tax rate = $14,800 in tax in one year.   
Present value of tax = $14,800 × 0.917 (discount factor, one year, 9 percent) = $13,572   
After-tax income = Pretax income − Present value tax = $40,000 − $13,572 = $26,428   
Sending the $40,000 bill in December is preferred.

Essay

While Rocco's collection efforts are likely to warrant some fee from Lucky, a 50 percent fee is not likely to hold up to scrutiny. In particular, because this is a related-party transaction, the IRS is likely to scrutinize whether the 50 percent is reasonable or instead if this is just a scheme to assign Lucky's income to Rocco. Both the assignment of income and substance-over-form doctrines come into play in this transaction. If Lucky wants to shift income to Rocco, he can employ Rocco and pay him a market (i.e., reasonable) wage. Conversely, if he owns income-generating property, he can transfer ownership of the property to Rocco, which will result in Rocco being taxed on the property's income in the future. The downside to this transaction is that Lucky may have serious reservations about transferring significant wealth to his son.

Essay

Bono could reduce his family's tax burden by employing his son in his sole proprietorship, thus shifting income taxed at 32 percent (Bono's marginal tax rate) to 15 percent (Richie's tax rate). It currently takes Bono $17,647.06 of pretax income to generate the $12,000 after taxes given to Richie.   
After-tax income = Pretax income × (1 − marginal tax rate)   
$12,000 = Pretax income × (1 − 0.32)   
Pretax income = $12,000 ÷ (0.68) = $17,647.06.  
If Richie worked for Bono's sole proprietorship, he would only have to pay him $14,117.65 to generate $12,000 after taxes.   
After-tax income = Pretax income × (1 − marginal tax rate)   
$12,000 = Pretax income × (1 − 0.15)   
Pretax income = $12,000 ÷ (0.85) = $14,117.65.   
This strategy will save Bono $3,529.41 pretax (i.e., $17,647.06 − $14,117.65) and $2,400 after taxes ($3,529.41 × (1 − 0.32)).

Essay

Bono could reduce his family's tax burden by employing his son in his sole proprietorship, thus shifting income taxed at 32 percent (Bono's marginal tax rate) to 15 percent (Richie's tax rate). It currently takes Bono $29,411.76 of pretax income to generate the $20,000 after taxes given to Richie.  
After-tax income = Pretax income × (1 − marginal tax rate)   
$20,000 = Pretax income × (1 − 0.32)   
Pretax income = $20,000 ÷ (0.68) = $29,411.76.   
If Richie worked for Bono's sole proprietorship, he would only have to pay him $23,529.41 to generate $20,000 after-taxes.   
After-tax income = Pretax income × (1 − marginal tax rate)   
$20,000 = Pretax income × (1 − 0.15)   
Pretax income = $20,000 ÷ (0.85) = $23,529.41.   
This strategy will save Bono $5,882.35 pretax (i.e., $29,411.76 − $23,529.41) and $4,000 after tax ($5,882.35 × (1 − 0.32)).

Essay

Assuming Jayzee's goal is to minimize his current federal income tax exposure, one can compare the single individual and corporate tax rate schedules to achieve this goal. Since Jayzee has $25,000 of taxable income not related to his sole proprietorship, he is currently in the 12 percent tax bracket. The task is to allocate the $125,000 between Jayzee and his corporation to minimize his current liability. The corporate tax rate is 21 percent and is higher than Jayzee's marginal tax rate of 12 percent. To take advantage of the remaining $19,725 of the 12 percent individual tax bracket ($44,725 − $25,000), $19,725 of the profits should be shifted to Jayzee. Jayzee's personal marginal tax rate would now be 22 percent, and his corporation's marginal tax rate of 21 percent is now lower. To minimize this year's taxes, the remaining $105,275 of corporate profits should be retained in the corporation and taxed at 21 percent. In sum, $105,275 of the expected profits are retained in the corporation and $19,725 of the profits are shifted to Jayzee.  
This strategy will save Jayzee $2,145.25, calculated as:

|  |  |
| --- | --- |
| **(a) The tax on $150,000 of taxable income reported by Jayzee, if he operates his business as a sole proprietorship** | $ 29,400.00 |
| **Less:** |  |
| **(b) The tax on $44,725 of taxable income reported by Jayzee, if he incorporates his business** | −$ 5,147.00 |
| **(c) The tax on $105,275 profits retained in the corporation** | −$ 22,107.75 |
| **Total** | =$ 2,145.25 |

Essay

Assuming Bobby and Whitney's goal is to minimize their current federal income tax exposure, one can compare the married filing jointly and corporate tax rate schedules to achieve this goal. Since Bobby and Whitney have $50,000 of taxable income not related to the sole proprietorship, they are currently in the 12 percent tax bracket. The task is to allocate the $175,000 between Bobby and Whitney and the corporation to minimize their current liability. The corporate tax rate is 21 percent and is higher than Bobby and Whitney's marginal tax rate of 12 percent. To take advantage of the remaining $39,450 of the 12 percent individual tax bracket ($89,450 − $50,000), $39,450 of the profits should be shifted to Bobby and Whitney. Bobby and Whitney's personal marginal tax rate would now be 22 percent, which is higher than the corporation's tax rate of 21 percent. To take advantage of the corporation's 21 percent tax bracket, the remaining $135,550 of corporate income should be retained in the corporation. In sum, $135,550 of the expected profits are retained in the corporation and $39,450 of the profits are shifted to Bobby and Whitney.  
This strategy will save Bobby and Whitney $2,040.50, calculated as:

|  |  |
| --- | --- |
| **(a) The tax on $225,000 of taxable income reported by Bobby and Whitney, if Whitney operates her business as a sole proprietorship** | $ 40,800.00 |
| **Less:** |  |
| **(b) The tax on $89,450 of taxable income reported by Bobby and Whitney, if they incorporate the business** | −$ 10,294.00 |
| **(c) The tax on $135,550 profits retained in the corporation** | −$ 28,465.50 |
| **Total** | =$ 2,040.50 |

Essay

Rob's after-tax rate of return on the tax-exempt bond is 4 percent (i.e., the same as its pretax rate of return). The Dell Computer bond pays taxable interest of 6.50 percent. Rob's after-tax rate of return on the Dell Computer bond is 5.20 percent (i.e., 6.50 percent interest income − (6.50% × 20%) tax = 5.20%). Rob should invest in the Dell Computer bond.   
If Rob's marginal tax rate is 30 percent, his after-tax rate of return on the Dell Computer bond would be 4.55 percent (i.e., 6.50% interest income − (6.50% × 30%) tax = 4.55%). Rob should invest in the Dell Computer bond in this situation.   
Rob would be indifferent between the two bonds if his marginal tax rate is 38.46 percent.   
After-tax return = Pretax return × (1 − marginal tax rate)   
4% = 6.50% × (1 − marginal tax rate) = 6.50% − (6.50% × marginal tax rate)   
6.50% marginal tax rate = 2.50%   
Marginal tax rate = 2.50% ÷ 6.50% = 38.46%   
This example is an illustration of the conversion planning strategy.

Essay

Maurice's after-tax rate of return on the dividend-paying stock is 5.10 percent (i.e., 6% × (1 − 0.15)). The Coca-Cola Company bond pays taxable interest of 8 percent. Maurice's after-tax rate of return on the Coca-Cola Company bond is 6 percent (i.e., 8% interest income − (8% × 25%) tax = 6%). Maurice should invest in the Coca-Cola Company bond.   
If Maurice's marginal tax rate is 30 percent, his after-tax rate of return on the Coca-Cola Company bond would be 5.60 percent (i.e., 8% interest income − (8% × 30%) tax = 5.60%). Maurice should still invest in the Coca-Cola bond in this situation.   
Maurice would be indifferent between the two investments if his ordinary tax rate is 36.25 percent.   
After-tax return = Pretax return × (1 − marginal tax rate)   
5.10% = 8% × (1 − marginal tax rate) = 8% − (8% × marginal tax rate)   
8% marginal tax rate = 2.90%   
Marginal tax rate = 2.90% ÷ 8% = 36.25%   
This example is an illustration of the conversion planning strategy.

Essay

Corporate bond 0.10 × (1 − 0.35) = 6.50%

Dividend-paying stock 0.10 × (1 − 0.15) = 8.50%

Growth stock $25,000 × (1 + 0.08)5(1 + 0.08) to the power of 5 = $36,733 $36,733 − $25,000 = $11,733 $11,733 × 0.15 = $1,760 $36,733 − $1,760 = $34,973 [($34,973 ÷ $25,000) 1÷5 − 1] = 6.94%

Essay

Corporate bond 0.20 × (1 − 0.35) = 13%

Dividend-paying stock 0.08 × (1 − 0.15) = 6.8%

Growth stock $19,000 × (1 + 0.068)5 = $26,400 $26,400 − $19,000 = $7,400 $7,400 × 0.15 = $1,110 $26,400 − $1,110 = $25,290 [($25,290 ÷ $19,000)1÷5 − 1] = 5.89%

Essay

Boeing should choose to operate the plant in the state with the 5 percent tax rate. Operating the plant in this state would generate $1,030,750 of profits after state taxes (i.e., $1,085,000 − (5% × $1,085,000) = $1,030,750) versus $1,020,000 of profits after state taxes (i.e., $1,200,000 − (15% × $1,200,000) = $1,020,000) if Boeing operated in the state with the 15 percent rate.   
The state with a lower tax rate produces a lower pretax income because the demand for workers, services, property, etc. in the low tax rate state jurisdiction has most likely increased the costs associated with operating a business in this state. These increased costs are considered implicit taxes and reduce the tax advantages of operating in the low tax rate state.