

## Chapter 02

### Property Acquisition and Cost Recovery

#### True / False Questions

1. Like financial accounting, most acquired business property must be capitalized for tax purposes.

True False

2. Tax cost recovery methods include depreciation, amortization, and depletion.

True False

3. If a business mistakenly claims too little depreciation, the business must only reduce the asset's basis by the depreciation actually taken rather than the amount of the allowable depreciation.

True False

4. An asset's capitalized cost basis includes only the actual purchase price; whereas expenses to purchase, prepare the asset for use, and begin using the asset are immediately expensed.

True False

5. The basis for a personal use asset converted to business use is the lesser of the asset's cost basis or fair market value on the date of the transfer or conversion.

True False

6. Depreciation is currently computed under the Modified Accelerated Cost Recovery System (MACRS).

True False

7. The 200 percent or double declining balance method is allowable for five and seven-year property.

True False

8. Taxpayers may use historical data to determine the recovery period for tax depreciation.

True False

9. Taxpayers use the half-year convention for all assets.

True False

10. If a taxpayer places only one asset (a building) in service during the fourth quarter of the year, the mid-quarter convention must be used.

True False

11. The MACRS depreciation tables automatically switch to the straight-line method when the straight-line method yields a higher annual depreciation amount than the declining balance method.

True False

12. If tangible personal property is depreciated using the half-year convention and is disposed of during the first quarter of a subsequent year, the taxpayer must use the mid-quarter convention for the year of disposition.

True False

13. If a machine (seven-year property) being depreciated using the half-year convention is disposed of during the seventh year, a taxpayer must multiply the appropriate depreciation percentage from the MACRS table percentage by 50 percent to calculate the depreciation expense properly.

True False

14. Real property is always depreciated using the straight-line method.

True False

15. The mid-month convention applies to real property in the year of acquisition and disposition.

True False

16. All taxpayers may use the §179 immediate expensing election on certain property.

True False

17. The §179 immediate expensing election phases out based upon a taxpayer's taxable income.

True False

18. The §179 immediate expensing election phases out based upon the amount of tangible personal property a taxpayer places in service during the year.

True False

19. Property expensed under the §179 immediate expensing election is not included in the 40 percent test to determine whether the mid-quarter convention must be used.

True False

20. In general, a taxpayer should select longer-lived property for the §179 immediate expensing election.

True False

21. Occasionally bonus depreciation is used as a stimulus tool by tax policy makers.

True False

22. Business assets that tend to be used for both business and personal purposes are referred to as listed property.

True   False

23. If the business use percentage for listed property falls below 50 percent, the only adjustment is all future depreciation must be calculated under the straight-line method.

True   False

24. Significant limits are placed on the depreciation of luxury automobiles.

True   False

25. The alternative depreciation system requires both a slower method of recovery and longer recovery periods.

True   False

26. The method for tax amortization is always the straight-line method.

True   False

27. All assets subject to amortization have the same recovery period.

True   False

28. Goodwill and customer lists are examples of §197 amortizable assets.

True   False

29. Taxpayers may always expense a portion of start-up costs and organizational expenditures.

True   False

30. Businesses may immediately expense research and experimentation expenditures or they may elect to capitalize these costs and amortize them using the straight-line method over a period of not less than 60 months.

True   False

31. The manner in which a business amortizes a patent or copyright is the same whether the business directly purchases the patent or copyright or whether it self-creates the intangible.

True   False

32. Depletion is the method taxpayers use to recover their capital investment in natural resources.

True   False

33. In general, major integrated oil and gas producers may take the greater of cost or percentage depletion.

True   False

34. Cost depletion is available to all natural resource producers.

True   False

35. Businesses deduct percentage depletion when they sell the natural resource and they deduct cost depletion in the year they produce or extract the natural resource.

True   False

## Multiple Choice Questions

36. Tax cost recovery methods do not include:

- A. Amortization
- B. Capitalization
- C. Depletion
- D. Depreciation
- E. All of these are tax cost recovery methods

37. Which of the following business assets is not depreciated?

- A. Automobile
- B. Building
- C. Patent
- D. Machinery
- E. All of these are depreciated

38. An office desk is an example of:

- A. Personal property
- B. Personal-use property
- C. Real property
- D. Business property
- E. Personal property and Business property

39. An example of an asset that is both personal-use and personal property is:

- A. A computer used solely to email company employees regarding company activities
- B. A storage building used by the CEO to store personal records
- C. A computer used solely to monitor the CEO's investments and to complete her Form 1040
- D. A company airplane used by the CEO for business travel
- E. All of these are personal-use and personal property

40. Which of the following is not usually included in an asset's tax basis?
- A. Purchase price
  - B. Sales tax
  - C. Shipping
  - D. Installation costs
  - E. All of these are included in an asset's tax basis
41. Which of the following would be considered an improvement rather than a routine maintenance?
- A. Oil change
  - B. Engine overhaul
  - C. Wiper blade replacement
  - D. Air filter change
42. Tax depreciation is currently calculated under what system?
- A. Sum of the years digits
  - B. Accelerated cost recovery system
  - C. Modified accelerated cost recovery system
  - D. Straight line system
  - E. None of these
43. Which is not an allowable method under MACRS?
- A. 150 percent declining balance
  - B. 200 percent declining balance
  - C. Straight line
  - D. Sum of the years digits
  - E. All of these are allowable methods under MACRS

44. Which of the allowable methods allows the most accelerated depreciation?

- A. 150 percent declining balance
- B. 200 percent declining balance
- C. Straight line
- D. Sum of the years digits
- E. None of these allow accelerated depreciation

45. How is the recovery period of an asset determined?

- A. Estimated useful life
- B. Treasury regulation
- C. Revenue Procedure 87-56
- D. Revenue Ruling 87-56
- E. None of these

46. Which of the following depreciation conventions are not used under MACRS?

- A. Full-month
- B. Half-year
- C. Mid-month
- D. Mid-quarter
- E. All of these are used under MACRS

47. Which depreciation convention is the general rule for tangible personal property?

- A. Full-month
- B. Half-year
- C. Mid-month
- D. Mid-quarter
- E. None of these are conventions for tangible personal property



48. The MACRS recovery period for automobiles and computers is:
- A. 3 years
  - B. 5 years
  - C. 7 years
  - D. 10 years
  - E. None of these
49. Lax, LLC purchased only one asset during the current year (a full 12-month tax year). Lax placed in service computer equipment (5-year property) on August 26 with a basis of \$20,000. Calculate the maximum depreciation expense for the current year (ignoring §179 and bonus depreciation):
- A. \$2,000
  - B. \$2,858
  - C. \$3,000
  - D. \$4,000
  - E. None of these
50. Sairra, LLC purchased only one asset during the current year (a full 12-month tax year). Sairra placed in service furniture (7-year property) on April 16 with a basis of \$25,000. Calculate the maximum depreciation expense for the current year, rounding to a whole number (ignoring §179 and bonus depreciation):
- A. \$1,786
  - B. \$3,573
  - C. \$4,463
  - D. \$5,000
  - E. None of these

51. Beth's business purchased only one asset during the current year (a full 12-month tax year). Beth placed in service machinery (7-year property) on December 1 with a basis of \$50,000. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation):
- A. \$1,785
  - B. \$2,500
  - C. \$7,145
  - D. \$10,000
  - E. None of these
52. Deirdre's business purchased two assets during the current year (a full 12-month tax year). Deirdre placed in service computer equipment (5-year property) on January 20 with a basis of \$15,000 and machinery (7-year property) on October 1 with a basis of \$15,000. Calculate the maximum depreciation expense, rounded to a whole number (ignoring §179 and bonus depreciation):
- A. \$1,286
  - B. \$5,144
  - C. \$5,786
  - D. \$6,000
  - E. None of these
53. Suvi, Inc. purchased two assets during the current year (a full 12-month tax year). Suvi placed in service computer equipment (5-year property) on August 10 with a basis of \$20,000 and machinery (7-year property) on November 18 with a basis of \$10,000. Calculate the maximum depreciation expense, rounded to a whole number (ignoring §179 and bonus depreciation):
- A. \$857
  - B. \$3,357
  - C. \$5,429
  - D. \$6,000
  - E. None of these

54. Wheeler LLC purchased two assets during the current year (a full 12-month tax year). Wheeler placed in service computer equipment (5-year property) on November 16 with a basis of \$15,000 and furniture (7-year property) on April 20 with a basis of \$11,000. Calculate the maximum depreciation expense, rounding to a whole number (ignoring §179 and bonus depreciation):
- A. \$1,285
  - B. \$2,714
  - C. \$4,572
  - D. \$5,200
  - E. None of these
55. Tasha LLC purchased furniture (7-year property) on April 20 with a basis of \$20,000 and used the mid-quarter convention. During the current year, which is the fourth year Tasha LLC owned the property, the property was disposed of on December 15. Calculate the maximum depreciation expense, rounding to a whole number:
- A. \$898
  - B. \$2,095
  - C. \$2,461
  - D. \$2,394
  - E. None of these
56. Anne LLC purchased computer equipment (5-year property) on August 29 with a basis of \$30,000 and used the half-year convention. During the current year, which is the fourth year Anne LLC owned the property, the property was disposed of on January 15. Calculate the maximum depreciation expense:
- A. \$432
  - B. \$1,728
  - C. \$1,874
  - D. \$3,456
  - E. None of these

57. Poplock LLC purchased a warehouse and land during the current year for \$350,000. The purchase price was allocated as follows: \$275,000 to the building and \$75,000 to the land. The property was placed in service on August 12. Calculate Poplock's maximum depreciation for this first year, rounded to the nearest whole number:
- A. \$2,648
  - B. \$3,371
  - C. \$3,751
  - D. \$4,774
  - E. None of these
58. Tom Tom LLC purchased a rental house and land during the current year for \$150,000. The purchase price was allocated as follows: \$100,000 to the building and \$50,000 to the land. The property was placed in service on May 22. Calculate Tom Tom's maximum depreciation for this first year:
- A. \$1,605
  - B. \$2,273
  - C. \$2,408
  - D. \$3,410
  - E. None of these
59. Simmons LLC purchased an office building and land several years ago for \$250,000. The purchase price was allocated as follows: \$200,000 to the building and \$50,000 to the land. The property was placed in service on October 2. If the property is disposed of on February 27 during the 10<sup>th</sup> year, calculate Simmons' maximum depreciation in the 10<sup>th</sup> year:
- A. \$641
  - B. \$909
  - C. \$5,128
  - D. \$7,346
  - E. None of these

60. Which of the following assets are eligible for §179 expensing?
- A. Used office machinery
  - B. Qualified leasehold improvements
  - C. A new delivery truck
  - D. Used office furniture
  - E. All of these
61. Lenter LLC placed in service on April 29, 2016 machinery and equipment (7-year property) with a basis of \$600,000. Assume that Lenter has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including section 179 expensing (but ignoring bonus expensing). Assume that the 2015 §179 limits are identical to 2016:
- A. \$85,740
  - B. \$120,000
  - C. \$514,290
  - D. \$585,740
  - E. None of these
62. Littman LLC placed in service on July 29, 2016 machinery and equipment (7-year property) with a basis of \$600,000. Littman's income for the current year before any depreciation expense was \$100,000. Which of the following statements is true to maximize Littman's total depreciation expense for 2016? (Assume that the 2015 §179 limits are identical to 2016.)
- A. Littman should take §179 expense equal to the maximum \$500,000.
  - B. Littman should take no §179 expense.
  - C. Littman's §179 expense will be greater than \$100,000.
  - D. Littman's §179 expense will be less than \$100,000.
  - E. None of these.

63. Crouch LLC placed in service on May 19, 2016 machinery and equipment (7-year property) with a basis of \$2,200,000. Assume that Crouch has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (but ignoring bonus expensing). (Assume that the 2015 §179 limits are identical to 2016.)
- A. \$314,380.
  - B. \$440,000.
  - C. \$571,510.
  - D. \$742,930.
  - E. None of these.
64. Clay LLC placed in service machinery and equipment (7-year property) with a basis of \$2,450,000 on June 6, 2016. Assume that Clay has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (ignoring any possible bonus expensing), rounded to a whole number. (Assume that the 2015 §179 limits are identical to 2016.)
- A. \$350,105
  - B. \$392,960
  - C. \$778,070
  - D. \$864,395
  - E. None of these
65. Bonnie Jo purchased a used computer (5-year property) for use in her sole proprietorship. The basis of the computer was \$2,400. Bonnie Jo used the computer in her business 60 percent of the time and used it for personal purposes the rest of the time during the first year. Calculate Bonnie Jo's depreciation expense during the first year assuming the sole proprietorship had a loss during the year (Bonnie did not place the property in service in the last quarter):
- A. \$240
  - B. \$288
  - C. \$480
  - D. \$2,400
  - E. None of these

66. Billie Bob purchased a used computer (5-year property) for use in his sole proprietorship in the prior year. The basis of the computer was \$2,400. Billie Bob used the computer in his business 60 percent of the time during the first year. During the second year, Billie Bob used the computer 40 percent for business use. Calculate Billie Bob's depreciation expense during the second year assuming the sole proprietorship had a loss during the year (Billie Bob did not place the asset in service in the last quarter):

- A. \$0
- B. \$48
- C. \$192
- D. \$336
- E. None of these

67. Which of the following assets is eligible for bonus depreciation?

- A. Used office machinery
- B. Qualified leasehold improvements
- C. A new delivery truck
- D. Used office furniture
- E. All of these

68. Potomac LLC purchased an automobile for \$30,000 on August 5, 2016. What is Potomac's depreciation expense for 2016? (ignore any possible bonus depreciation)

- A. \$3,160
- B. \$4,287
- C. \$6,000
- D. \$30,000
- E. None of these

69. Arlington LLC purchased an automobile for \$40,000 on July 5, 2016. What is Arlington's depreciation expense for 2016 if its business use percentage is 75 percent? (ignore any possible bonus depreciation)
- A. \$2,370
  - B. \$3,160
  - C. \$6,000
  - D. \$8,000
  - E. None of these
70. Assume that Bethany acquires a competitor's assets on March 31<sup>st</sup>. The purchase price was \$150,000. Of that amount, \$125,000 is allocated to tangible assets and \$25,000 is allocated to goodwill (a §197 intangible asset). What is Bethany's amortization expense for the current year, rounded to the nearest whole number?
- A. \$0
  - B. \$1,250
  - C. \$1,319
  - D. \$1,389
  - E. None of these
71. Assume that Brittany acquires a competitor's assets on September 30<sup>th</sup> of year 1 for \$350,000. Of that amount, \$300,000 is allocated to tangible assets and \$50,000 is allocated equally to two §197 intangible assets (goodwill and a 1-year non-compete agreement). Given, that the non-compete agreement expires on September 30<sup>th</sup> of year 2, what is Brittany's amortization expense for the second year, rounded to the nearest whole number?
- A. \$0
  - B. \$1,667
  - C. \$2,917
  - D. \$3,333
  - E. None of these



72. Jasmine started a new business in the current year. She incurred \$10,000 of start-up costs. How much of the start-up costs can be immediately expensed (excluding amounts amortized over 180 months) for the year?
- A. \$0
  - B. \$2,500
  - C. \$5,000
  - D. \$10,000
  - E. None of these
73. Racine started a new business in the current year. She incurred \$52,000 of start-up costs. If her business started on November 23<sup>rd</sup> of the current year, what is the total expense she may deduct with respect to the start-up costs for her initial year, rounded to the nearest whole number?
- A. \$2,555
  - B. \$3,544
  - C. \$5,522
  - D. \$52,000
  - E. None of these
74. Daschle LLC completed some research and development during June of the current year. The related costs were \$60,000. If Daschle wants to capitalize and amortize the costs as quickly as possible, what is the total amortization expense Daschle may deduct during the current year?
- A. \$0
  - B. \$6,500
  - C. \$7,000
  - D. \$12,000
  - E. None of these

75. Jorge purchased a copyright for use in his business in the current year. The purchase occurred on July 15<sup>th</sup> and the purchase price was \$75,000. If the patent has a remaining life of 75 months, what is the total amortization expense Jorge may deduct during the current year?
- A. \$0
  - B. \$5,500
  - C. \$6,000
  - D. \$12,000
  - E. None of these
76. Geithner LLC patented a process it developed in the current year. The patent is expected to create benefits for Geithner over a 10-year period. The patent was issued on April 15<sup>th</sup> and the legal costs associated with the patent were \$43,000. In addition, Geithner had unamortized research expenditures of \$15,000 related to the process. What is the total amortization expense Geithner may deduct during the current year?
- A. \$2,417
  - B. \$2,174
  - C. \$4,108
  - D. \$4,350
  - E. None of these
77. Santa Fe purchased the rights to extract turquoise on a tract of land over a five-year period. Santa Fe paid \$300,000 for extraction rights. A geologist estimates that Santa Fe will recover 5,000 pounds of turquoise. During the current year, Santa Fe extracted 1,500 pounds of turquoise, which it sold for \$200,000. What is Santa Fe's cost depletion expense for the current year?
- A. \$60,000
  - B. \$90,000
  - C. \$110,000
  - D. \$300,000
  - E. None of these

78. Santa Fe purchased the rights to extract turquoise on a tract of land over a five-year period. Santa Fe paid \$300,000 for extraction rights. A geologist estimated that Santa Fe will recover 5,000 pounds of turquoise. During the past several years, 4,000 pounds were extracted. During the current year, Santa Fe extracted 1,500 pounds of turquoise, which it sold for \$250,000. What is Santa Fe's cost depletion expense for the current year?
- A. \$60,000  
B. \$90,000  
C. \$190,000  
D. \$160,000  
E. None of these
79. Lucky Strike Mine (LLC) purchased a silver deposit for \$1,500,000. It estimated it would extract 500,000 ounces of silver from the deposit. Lucky Strike mined the silver and sold it reporting gross receipts of \$1.8 million, \$2.5 million, and \$2 million for years 1 through 3, respectively. During years 1 - 3, Lucky Strike reported net income (loss) from the silver deposit activity in the amount of (\$100,000), \$400,000, and \$100,000, respectively. In years 1 - 3, Lucky Strike actually extracted 300,000 ounces of silver as follows:

Ounces extracted per year		
Year 1	Year 2	Year 3
50,000	150,000	100,000

What is Lucky Strike's depletion expense for year 2 if the applicable percentage depletion for silver is 15 percent?

- A. \$200,000  
B. \$375,000  
C. \$400,000  
D. \$450,000  
E. None of these

## Essay Questions

80. Janey purchased machinery on April 8<sup>th</sup> of the current year. The relevant costs for the year are as follows: machinery for \$10,000, \$800 shipping, \$50 for delivery insurance, \$500 for installation, \$750 for sales tax, \$150 for the annual tune up, and \$200 of property taxes (an annual tax on business property). What is Janey's tax basis for the machinery?
81. Jaussi purchased a computer several years ago for \$2,200 and used it for personal purposes. On November 10<sup>th</sup> of the current year, when the fair market value of the computer was \$800, Jaussi converted it to business use. What is Jaussi's tax basis for the computer?

82. Flax, LLC purchased only one asset this year. Flax placed in service a computer (5-year property) on January 16 with a basis of \$14,000. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation).
83. Roth, LLC purchased only one asset during the current year. Roth placed in service computer equipment (5-year property) on November 1<sup>st</sup> with a basis of \$42,500. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation).
84. Eddie purchased only one asset during the current year. Eddie placed in service furniture (7-year property) on May 1<sup>st</sup> with a basis of \$26,500. Calculate the maximum depreciation expense, rounded to the nearest whole number (ignoring §179 and bonus depreciation).

85. Teddy purchased only one asset during the current year. Teddy placed in service machinery (7-year property) on October 1<sup>st</sup> with a basis of \$76,500. Calculate the maximum depreciation expense, rounded to the nearest whole number (ignoring §179 and bonus depreciation).
86. Amit purchased two assets during the current year. Amit placed in service computer equipment (5-year property) on April 16<sup>th</sup> with a basis of \$5,000 and furniture (7-year property) on September 9<sup>th</sup> with a basis of \$20,000. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation).

87. Yasmin purchased two assets during the current year. Yasmin placed in service computer equipment (5-year property) on May 26<sup>th</sup> with a basis of \$10,000 and machinery (7-year property) on December 9<sup>th</sup> with a basis of \$10,000. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation).

88. Bonnie Jo used two assets during the current year. The first was computer equipment with an original basis of \$15,000, currently in the second year of depreciation, and under the half-year convention. This asset was disposed of on October 1<sup>st</sup> of the current year. The second was furniture with an original basis of \$24,000 placed in service during the first quarter, currently in the fourth year of depreciation, and under the mid-quarter convention. What is Bonnie Jo's depreciation expense for the current year, rounded to the nearest whole number?

89. Kristine sold two assets on March 20<sup>th</sup> of the current year. The first was machinery with an original basis of \$51,000, currently in the fourth year of depreciation, and under the half-year convention. The second was furniture with an original basis of \$16,000 placed in service during the fourth quarter, currently in the third year of depreciation, and under the mid-quarter convention. What is Kristine's depreciation expense for the current year, rounded to the nearest whole number?
90. Timothy purchased a new computer for his consulting practice on October 15<sup>th</sup> of the current year. The basis of the computer was \$4,000. During the Thanksgiving holiday, he decided the computer didn't meet his business needs and gave it to his college-aged son in another state. The computer was never used for business purposes again. Timothy had \$50,000 of taxable income before depreciation. What is Timothy's total cost recovery expense with respect to the computer during the current year?



91. During August of the prior year, Julio purchased an apartment building that he used as a rental property. The basis was \$1,400,000. Calculate the maximum depreciation expense during the current year.
92. During April of the current year, Ronen purchased a warehouse that he used for business purposes. The basis was \$1,600,000. Calculate the maximum depreciation expense during the current year.

93. An office building was purchased on December 9<sup>th</sup> several years ago for \$2,500,000. The purchase price was allocated as follows: building \$1,900,000, landscaping \$100,000, and land \$500,000. During the current year, the 10<sup>th</sup> year, the building was sold on March 10<sup>th</sup>. Calculate the maximum depreciation expense for the real property during the current year, rounded to the nearest whole number.
94. Olney LLC only purchased one asset this year. Olney LLC placed in service on July 19, 2016 machinery and equipment (7-year property) with a basis of \$850,000. Assume that Olney has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing, rounded to the nearest whole number (but ignoring bonus expensing). Assume the 2015 §179 limits are identical to 2016.

95. Columbia LLC only purchased one asset this year. Columbia LLC placed in service on October 9, 2016 machinery and equipment (7-year property) with a basis of \$2,150,000. Assume that Columbia has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (but ignoring bonus expensing) for the year, rounded to the nearest whole number. Assume the 2015 §179 limits are identical to 2016.
96. Northern LLC only purchased one asset this year. In 2016, Northern LLC placed in service on September 6<sup>th</sup> machinery and equipment (7-year property) with a basis of \$2,200,000. Assume that Northern has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (ignore any potential bonus expensing), rounded to the nearest whole number. Assume the 2015 §179 limits are identical to 2016.

97. Reid acquired two assets in 2016: computer equipment (5-year property) acquired on August 6<sup>th</sup> with a basis of \$500,000 and machinery (7-year property) on November 9<sup>th</sup> with a basis of \$500,000. Assume that Reid has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (but not bonus expensing). Assume the 2015 §179 limits are identical to 2016.
98. Phyllis purchased \$8,000 of specialized audio equipment that she uses in her business regularly. Occasionally, she uses the equipment for personal use. During the first year, Phyllis used the equipment for business use 70 percent of the time; however, during the current (second) year the business use fell to 40 percent. Assume that the equipment is seven-year MACRS property and is under the half-year convention. Assume the ADS recovery period is 10 years. What is the depreciation allowance for the current year, rounded to the nearest whole number?

99. Alexandra purchased a \$35,000 automobile during 2016. The business use was 70 percent. What is the allowable depreciation for the current year? (ignore any possible bonus depreciation)

100. Boxer LLC has acquired various types of assets recently used 100% in its trade or business. Below is a list of assets acquired during 2015 and 2016:

Asset	Cost Basis	Convention	Date Placed in Service
Machinery	25,000	Half year	January 24, 2015
Warehouse	800,000	Mid month	August 1, 2015
Furniture	100,000		October 5, 2016
Computer equipment	65,000		October 10, 2016
Office equipment	34,000		September 28, 2016
Automobile	35,000		July 15, 2016
Office building	800,000		September 24, 2016

Boxer did not elect §179 expense and elected out of bonus depreciation in 2015, but would like to elect §179 expense for 2016 (assume that taxable income is sufficient). Calculate Boxer's maximum depreciation expense for 2016, rounded to the nearest whole number (ignore bonus depreciation for 2016). If necessary, use the 2015 luxury automobile limitation amount for 2016 and assume that the 2015 §179 limits are identical to 2016.

101. Assume that Yuri acquires a competitor's assets on May 1<sup>st</sup>. The purchase price was \$500,000. Of the amount, \$325,000 is allocated to tangible assets and \$175,000 is allocated to goodwill (a §197 intangible asset). What is Yuri's amortization expense for the current year, rounded to the nearest whole number?

102. Assume that Cannon LLC acquires a competitor's assets on June 15<sup>th</sup> of a prior year. The purchase price was \$450,000. Of the amount, \$196,200 is allocated to tangible assets and \$253,800 is allocated to three §197 intangible assets: \$153,000 to goodwill, \$50,400 to a customer list with an expected life of 8 years, and \$50,400 to a 3 year non-compete agreement. On May 30<sup>th</sup> of the second year, the customer list is sold for \$10,000. Please round your amortization amounts to the nearest whole number. Round your allocation percentage to the nearest whole percentage (e.g., .1234 as 12%).

- 1) What is Cannon's amortization expense for the second year?
- 2) What is the basis of the intangibles at the end of the second year?

103. Oksana started an LLC on November 2 of the current year. She incurred \$30,000 of start-up costs. How much of the start-up costs can be immediately expensed for the year? How much amortization may Oksana deduct in the first year?

104. Putin Corporation began business on September 23<sup>rd</sup> of the current year. It incurred \$40,000 of start-up costs and \$60,000 of organizational expenditures. How much total amortization may be deducted in the first year, rounded to the nearest whole number?



105. Paulsen incurred \$55,000 of research and experimental expenses and began amortizing them over 60 months during June of year 1. During May of year 3, Paulsen received a patent based upon the research being amortized. \$36,000 of legal expenses for the patent was incurred. The patent is expected to have a remaining useful life of 17 years.

1) What is the basis of the patent, rounding amortization for each year to the nearest whole number?

2) What is the amortization expense with respect to the patent during the year it was issued, rounded to the nearest whole number?

106. Sequoia purchased the rights to cut timber on several tracts of land over a fifteen-year period. It paid \$500,000 for cutting rights. A timber engineer estimates that 500,000 board feet of timber will be cut. During the current year, Sequoia cut 45,000 board feet of timber, which it sold for \$900,000. What is Sequoia's cost depletion expense for the current year?

107. PC Mine purchased a platinum deposit for \$3,500,000. It estimated it would extract 17,000 ounces of platinum from the deposit. PC mined the platinum and sold it reporting gross receipts of \$500,000 and \$8 million for years 1 and 2, respectively. During years 1 and 2, PC reported net income (loss) from the platinum deposit activity in the amount of (\$100,000) and \$3,800,000, respectively. In years 1 and 2, PC actually extracted 2,000 and 8,000 ounces of platinum. What is PC's depletion expense for years 1 and 2 if the applicable percentage depletion for platinum is 22 percent, rounded to the nearest whole number?

## Chapter 02 Property Acquisition and Cost Recovery **Answer Key**

### True / False Questions

1. Like financial accounting, most acquired business property must be capitalized for tax purposes.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

2. Tax cost recovery methods include depreciation, amortization, and depletion.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

3. If a business mistakenly claims too little depreciation, the business must only reduce the asset's basis by the depreciation actually taken rather than the amount of the allowable depreciation.

FALSE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 2 Medium*

*Topic: Cost Recovery and Basis for Cost Recovery*

4. An asset's capitalized cost basis includes only the actual purchase price; whereas expenses to purchase, prepare the asset for use, and begin using the asset are immediately expensed.

FALSE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 2 Medium*

*Topic: Cost Recovery and Basis for Cost Recovery*

5. The basis for a personal use asset converted to business use is the lesser of the asset's cost basis or fair market value on the date of the transfer or conversion.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 2 Medium*

*Topic: Cost Recovery and Basis for Cost Recovery*

6. Depreciation is currently computed under the Modified Accelerated Cost Recovery System (MACRS).

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

7. The 200 percent or double declining balance method is allowable for five and seven-year property.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

8. Taxpayers may use historical data to determine the recovery period for tax depreciation.

FALSE

Taxpayers use the recovery periods outlined in Revenue Procedure 87-56.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

9. Taxpayers use the half-year convention for all assets.

FALSE

For personal property, taxpayers use either the half-year or mid-quarter convention.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

10. If a taxpayer places only one asset (a building) in service during the fourth quarter of the year, the mid-quarter convention must be used.

FALSE

All real property is depreciated using the mid-month convention and does not factor into applicability of the mid-quarter convention for personal property.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

11. The MACRS depreciation tables automatically switch to the straight-line method when the straight-line method yields a higher annual depreciation amount than the declining balance method.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

12. If tangible personal property is depreciated using the half-year convention and is disposed of during the first quarter of a subsequent year, the taxpayer must use the mid-quarter convention for the year of disposition.

FALSE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

13. If a machine (seven-year property) being depreciated using the half-year convention is disposed of during the seventh year, a taxpayer must multiply the appropriate depreciation percentage from the MACRS table percentage by 50 percent to calculate the depreciation expense properly.

TRUE

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

14. Real property is always depreciated using the straight-line method.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

15. The mid-month convention applies to real property in the year of acquisition and disposition.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

16. All taxpayers may use the §179 immediate expensing election on certain property.

FALSE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 1 Easy*

*Topic: Special Rules Relating to Cost Recovery*

17. The §179 immediate expensing election phases out based upon a taxpayer's taxable income.

FALSE

The §179 phase out is based upon the amount of property placed in service during the year.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 1 Easy*



18. The §179 immediate expensing election phases out based upon the amount of tangible personal property a taxpayer places in service during the year.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 1 Easy*

*Topic: Special Rules Relating to Cost Recovery*

19. Property expensed under the §179 immediate expensing election is not included in the 40 percent test to determine whether the mid-quarter convention must be used.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 3 Hard*

*Topic: Special Rules Relating to Cost Recovery*

20. In general, a taxpayer should select longer-lived property for the §179 immediate expensing election.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 1 Easy*

*Topic: Special Rules Relating to Cost Recovery*

21. Occasionally bonus depreciation is used as a stimulus tool by tax policy makers.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 1 Easy*

*Topic: Special Rules Relating to Cost Recovery*

22. Business assets that tend to be used for both business and personal purposes are referred to as listed property.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 2 Medium*

*Topic: Special Rules Relating to Cost Recovery*

23. If the business use percentage for listed property falls below 50 percent, the only adjustment is all future depreciation must be calculated under the straight-line method.

FALSE

The property is subject to depreciation recapture for any excess depreciation over the straight line method using the ADS recovery period over the entire time.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

24. Significant limits are placed on the depreciation of luxury automobiles.

TRUE

AACSB: Reflective Thinking

AICPA: BB Critical Thinking

Accessibility: Keyboard Navigation

Blooms: Remember

Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.

Level of Difficulty: 1 Easy

Topic: Special Rules Relating to Cost Recovery

25. The alternative depreciation system requires both a slower method of recovery and longer recovery periods.

FALSE

AACSB: Reflective Thinking

AICPA: BB Critical Thinking

Accessibility: Keyboard Navigation

Blooms: Apply

Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.

Level of Difficulty: 2 Medium

Topic: Special Rules Relating to Cost Recovery

26. The method for tax amortization is always the straight-line method.

TRUE

AACSB: Reflective Thinking

AICPA: BB Critical Thinking

Accessibility: Keyboard Navigation

Blooms: Remember

Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.

Level of Difficulty: 1 Easy

Topic: Amortization

27. All assets subject to amortization have the same recovery period.

FALSE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 1 Easy*

*Topic: Amortization*

28. Goodwill and customer lists are examples of \$197 amortizable assets.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 2 Medium*

*Topic: Amortization*

29. Taxpayers may always expense a portion of start-up costs and organizational expenditures.

FALSE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 2 Medium*

*Topic: Amortization*

30. Businesses may immediately expense research and experimentation expenditures or they may elect to capitalize these costs and amortize them using the straight-line method over a period of not less than 60 months.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 1 Easy*

*Topic: Amortization*

31. The manner in which a business amortizes a patent or copyright is the same whether the business directly purchases the patent or copyright or whether it self-creates the intangible.

FALSE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 2 Medium*

*Topic: Amortization*

32. Depletion is the method taxpayers use to recover their capital investment in natural resources.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 1 Easy*

*Topic: Depletion*

33. In general, major integrated oil and gas producers may take the greater of cost or percentage depletion.

FALSE

Depletion of timber and major integrated oil companies must be calculated using only the cost depletion method (no percentage depletion is available).

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 2 Medium*

*Topic: Depletion*

34. Cost depletion is available to all natural resource producers.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 2 Medium*

*Topic: Depletion*

35. Businesses deduct percentage depletion when they sell the natural resource and they deduct cost depletion in the year they produce or extract the natural resource.

TRUE

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 2 Medium*

*Topic: Depletion*

## Multiple Choice Questions

36. Tax cost recovery methods do not include:

- A. Amortization
- B. Capitalization
- C. Depletion
- D. Depreciation
- E. All of these are tax cost recovery methods

Amortization, depletion, and depreciation are cost recovery methods as a result of asset capitalization.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

37. Which of the following business assets is not depreciated?

- A. Automobile
- B. Building
- C. Patent
- D. Machinery
- E. All of these are depreciated

Patents are amortized rather than depreciated.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

38. An office desk is an example of:

- A. Personal property
- B. Personal-use property
- C. Real property
- D. Business property
- E. Personal property and Business property

An office desk is both business property and personal property. It is not personal-use or real property.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*



39. An example of an asset that is both personal-use and personal property is:

- A. A computer used solely to email company employees regarding company activities
- B. A storage building used by the CEO to store personal records
- C. A computer used solely to monitor the CEO's investments and to complete her Form 1040
- D. A company airplane used by the CEO for business travel
- E. All of these are personal-use and personal property

A computer is personal property and when used by the CEO for non-business activities is also personal-use.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

40. Which of the following is not usually included in an asset's tax basis?

- A. Purchase price
- B. Sales tax
- C. Shipping
- D. Installation costs
- E. All of these are included in an asset's tax basis

The purchase price, sales tax, shipping, and installation costs are all included in an assets tax basis.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under*

*the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

41. Which of the following would be considered an improvement rather than a routine maintenance?

- A. Oil change
- B. Engine overhaul
- C. Wiper blade replacement
- D. Air filter change

The engine overhaul is an improvement because it restores a major component of an asset while the other items are routine maintenance.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

42. Tax depreciation is currently calculated under what system?

- A. Sum of the years digits
- B. Accelerated cost recovery system
- C. Modified accelerated cost recovery system
- D. Straight line system
- E. None of these

The modified accelerated cost recovery system (MACRS) is the current tax depreciation system.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

43. Which is not an allowable method under MACRS?

- A. 150 percent declining balance
- B. 200 percent declining balance
- C. Straight line
- D. Sum of the years digits
- E. All of these are allowable methods under MACRS

The sum of the years digits is not an allowable method under MACRS.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

44. Which of the allowable methods allows the most accelerated depreciation?

- A. 150 percent declining balance
- B. 200 percent declining balance
- C. Straight line
- D. Sum of the years digits
- E. None of these allow accelerated depreciation

The 200 percent declining balance method allows the most depreciation expense in earlier periods.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

45. How is the recovery period of an asset determined?

- A. Estimated useful life
- B. Treasury regulation
- C. Revenue Procedure 87-56
- D. Revenue Ruling 87-56
- E. None of these

Revenue Procedure 87-56 helps taxpayers to determine the recovery period for assets.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

46. Which of the following depreciation conventions are not used under MACRS?

- A. Full-month
- B. Half-year
- C. Mid-month
- D. Mid-quarter
- E. All of these are used under MACRS

The full month convention is used for tax amortization which does not fall under MACRS depreciation.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

47. Which depreciation convention is the general rule for tangible personal property?

- A. Full-month
- B. Half-year
- C. Mid-month
- D. Mid-quarter
- E. None of these are conventions for tangible personal property

The half-year convention is the general rule for tangible personal property, while the mid-quarter convention is the exception.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

48. The MACRS recovery period for automobiles and computers is:

- A. 3 years
- B. 5 years
- C. 7 years
- D. 10 years
- E. None of these

These assets' recovery period is 5 years.

*AACSB: Reflective Thinking*  
*AICPA: BB Critical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*  
*Level of Difficulty: 1 Easy*  
*Topic: Depreciation*

49. Lax, LLC purchased only one asset during the current year (a full 12-month tax year). Lax placed in service computer equipment (5-year property) on August 26 with a basis of \$20,000. Calculate the maximum depreciation expense for the current year (ignoring §179 and bonus depreciation):

- A. \$2,000
- B. \$2,858
- C. \$3,000
- D. \$4,000
- E. None of these

The asset's recovery period is 5 years and the half-year convention applies. The calculation is  $\$20,000 \times .2 = \$4,000$ .

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

50. Sairra, LLC purchased only one asset during the current year (a full 12-month tax year). Sairra placed in service furniture (7-year property) on April 16 with a basis of \$25,000. Calculate the maximum depreciation expense for the current year, rounding to a whole number (ignoring §179 and bonus depreciation):

- A. \$1,786
- B. \$3,573
- C. \$4,463
- D. \$5,000
- E. None of these

The asset's recovery period is 7 years and the half-year convention applies. The calculation is  $\$25,000 \times .1429 = \$3,573$ .

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*



51. Beth's business purchased only one asset during the current year (a full 12-month tax year). Beth placed in service machinery (7-year property) on December 1 with a basis of \$50,000. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation):

- A. \$1,785
- B. \$2,500
- C. \$7,145
- D. \$10,000
- E. None of these

The asset's recovery period is 7 years and the mid-quarter convention applies because the property was placed in service during the fourth quarter. The calculation is  $\$50,000 \times .0357 = \$1,785$ .

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

52. Deirdre's business purchased two assets during the current year (a full 12-month tax year). Deirdre placed in service computer equipment (5-year property) on January 20 with a basis of \$15,000 and machinery (7-year property) on October 1 with a basis of \$15,000. Calculate the maximum depreciation expense, rounded to a whole number (ignoring §179 and bonus depreciation):
- A. \$1,286
  - B. \$5,144
  - C. \$5,786
  - D. \$6,000
  - E. None of these

The mid-quarter convention applies because more than 40% of the years' assets were placed in service in the fourth quarter of the tax year. The computer is 1<sup>st</sup> quarter property and the machinery is 4<sup>th</sup> quarter property. The calculations are  $\$15,000 \times .35 = \$5,250$  and  $\$15,000 \times .0357 = \$536$ . The total is \$5,786 (\$5,250 + \$536).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

53. Suvi, Inc. purchased two assets during the current year (a full 12-month tax year). Suvi placed in service computer equipment (5-year property) on August 10 with a basis of \$20,000 and machinery (7-year property) on November 18 with a basis of \$10,000. Calculate the maximum depreciation expense, rounded to a whole number (ignoring §179 and bonus depreciation):
- A. \$857
  - B. \$3,357
  - C. \$5,429
  - D. \$6,000
  - E. None of these

The half-year convention applies. The calculations are  $\$20,000 \times .2 = \$4,000$  and  $\$10,000 \times .1429 = \$1,429$ . The total is \$5,429 ( $\$4,000 + \$1,429$ ).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

54. Wheeler LLC purchased two assets during the current year (a full 12-month tax year). Wheeler placed in service computer equipment (5-year property) on November 16 with a basis of \$15,000 and furniture (7-year property) on April 20 with a basis of \$11,000. Calculate the maximum depreciation expense, rounding to a whole number (ignoring §179 and bonus depreciation):
- A. \$1,285
  - B. \$2,714
  - C. \$4,572
  - D. \$5,200
  - E. None of these

The mid-quarter convention applies because more than 40% of the years' assets were placed in service in the fourth quarter of the tax year. The computer is 4<sup>th</sup> quarter property and the furniture is 2<sup>nd</sup> quarter property. The calculations are  $\$15,000 \times .05 = \$750$  and  $\$11,000 \times .1785 = \$1,964$ . The total is \$2,714 ( $\$750 + \$1,964$ ).

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

55. Tasha LLC purchased furniture (7-year property) on April 20 with a basis of \$20,000 and used the mid-quarter convention. During the current year, which is the fourth year Tasha LLC owned the property, the property was disposed of on December 15. Calculate the maximum depreciation expense, rounding to a whole number:

- A. \$898
- B. \$2,095
- C. \$2,461
- D. \$2,394
- E. None of these

The mid-quarter convention applies. The property was placed in service during the 2<sup>nd</sup> quarter. The calculations are  $\$20,000 \times .1197 = \$2,394 \times 10.5/12 = \$2,095$  since the property was disposed of during the 4<sup>th</sup> quarter.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 3 Hard*

*Topic: Depreciation*

56. Anne LLC purchased computer equipment (5-year property) on August 29 with a basis of \$30,000 and used the half-year convention. During the current year, which is the fourth year Anne LLC owned the property, the property was disposed of on January 15. Calculate the maximum depreciation expense:
- A. \$432
  - B. \$1,728
  - C. \$1,874
  - D. \$3,456
  - E. None of these

The calculations are  $\$30,000 \times .1152 = \$3,456 \times .5 = \$1,728$  since the property is considered to be owned for half the year in the year of disposition.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

57. Poplock LLC purchased a warehouse and land during the current year for \$350,000. The purchase price was allocated as follows: \$275,000 to the building and \$75,000 to the land. The property was placed in service on August 12. Calculate Poplock's maximum depreciation for this first year, rounded to the nearest whole number:

- A. \$2,648
- B. \$3,371
- C. \$3,751
- D. \$4,774
- E. None of these

The mid-month convention applies. Non-residential property has a 39-year recovery period. The depreciation is \$2,648 ( $\$275,000 \times .963\%$ ).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

58. Tom Tom LLC purchased a rental house and land during the current year for \$150,000. The purchase price was allocated as follows: \$100,000 to the building and \$50,000 to the land. The property was placed in service on May 22. Calculate Tom Tom's maximum depreciation for this first year:

- A. \$1,605
- B. \$2,273
- C. \$2,408
- D. \$3,410
- E. None of these

The mid-month convention applies. Residential property has a 27.5-year recovery period. The depreciation is \$2,273 ( $\$100,000 \times 2.273\%$ ).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*



59. Simmons LLC purchased an office building and land several years ago for \$250,000. The purchase price was allocated as follows: \$200,000 to the building and \$50,000 to the land. The property was placed in service on October 2. If the property is disposed of on February 27 during the 10<sup>th</sup> year, calculate Simmons' maximum depreciation in the 10<sup>th</sup> year:

- A. \$641
- B. \$909
- C. \$5,128
- D. \$7,346
- E. None of these

The mid-month convention applies. Non-residential property has a 39-year recovery period. The depreciation is \$641 ( $\$200,000 \times 2.564\% \times 1.5/12$ ).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

60. Which of the following assets are eligible for §179 expensing?

- A. Used office machinery
- B. Qualified leasehold improvements
- C. A new delivery truck
- D. Used office furniture
- E. All of these

All of the assets are eligible. Tangible personal property is eligible for §179 expensing whether it is new or used. Qualified leasehold improvements are also eligible for §179 expensing up to a lesser amount.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 2 Medium*

*Topic: Special Rules Relating to Cost Recovery*

61. Lenter LLC placed in service on April 29, 2016 machinery and equipment (7-year property) with a basis of \$600,000. Assume that Lenter has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including section 179 expensing (but ignoring bonus expensing). Assume that the 2015 §179 limits are identical to 2016:
- A. \$85,740
  - B. \$120,000
  - C. \$514,290
  - D. \$585,740
  - E. None of these

The \$500,000 §179 expense is not limited. The half year convention applies. The expense is \$514,290 which is depreciation of  $\$100,000 \times .1429 = \$14,290$  + \$500,000 of §179 expense.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 2 Medium*

*Topic: Special Rules Relating to Cost Recovery*

62. Littman LLC placed in service on July 29, 2016 machinery and equipment (7-year property) with a basis of \$600,000. Littman's income for the current year before any depreciation expense was \$100,000. Which of the following statements is true to maximize Littman's total depreciation expense for 2016? (Assume that the 2015 §179 limits are identical to 2016.)

- A. Littman should take §179 expense equal to the maximum \$500,000.
- B. Littman should take no §179 expense.
- C. Littman's §179 expense will be greater than \$100,000.
- D. Littman's §179 expense will be less than \$100,000.
- E. None of these.

The \$500,000 §179 expense is limited to income *after* regular MACRS depreciation but before §179 expense. The \$100,000 income amount is before any cost recovery. Thus to maximize its cost recovery, Littman should first elect \$16,637 of §179 expense. Littman's regular MACRS amount will be \$83,363 for a total of \$100,000 of cost recovery.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 3 Hard*

*Topic: Special Rules Relating to Cost Recovery*

63. Crouch LLC placed in service on May 19, 2016 machinery and equipment (7-year property) with a basis of \$2,200,000. Assume that Crouch has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (but ignoring bonus expensing). (Assume that the 2015 §179 limits are identical to 2016.)
- A. \$314,380.
  - B. \$440,000.
  - C. \$571,510.
  - D. \$742,930.
  - E. None of these.

The \$500,000 §179 expense is reduced to \$300,000 because of the property placed in service limitation (\$2,200,000 - \$2,000,000 threshold). The half year convention applies. The expense is \$571,510 which is depreciation of  $\$1,900,000 \times .1429 = \$271,510$  + \$300,000 of §179 expense.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 2 Medium*

*Topic: Special Rules Relating to Cost Recovery*

64. Clay LLC placed in service machinery and equipment (7-year property) with a basis of \$2,450,000 on June 6, 2016. Assume that Clay has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (ignoring any possible bonus expensing), rounded to a whole number. (Assume that the 2015 §179 limits are identical to 2016.)
- A. \$350,105
  - B. \$392,960
  - C. \$778,070
  - D. \$864,395
  - E. None of these

The \$500,000 §179 expense is reduced to \$50,000 because of the property placed in service limitation (\$2,450,000 - \$2,000,000 threshold). The half-year convention applies. The expense is \$392,960 which is depreciation of  $\$2,400,000 \times .1429 = \$342,960$  + \$50,000 of §179 expense.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 3 Hard*

*Topic: Special Rules Relating to Cost Recovery*

65. Bonnie Jo purchased a used computer (5-year property) for use in her sole proprietorship. The basis of the computer was \$2,400. Bonnie Jo used the computer in her business 60 percent of the time and used it for personal purposes the rest of the time during the first year. Calculate Bonnie Jo's depreciation expense during the first year assuming the sole proprietorship had a loss during the year (Bonnie did not place the property in service in the last quarter):
- A. \$240
  - B. \$288
  - C. \$480
  - D. \$2,400
  - E. None of these

The asset's recovery period is 5 years and the half-year convention applies. The calculation is  $\$2,400 \times .2 \times 60\% = \$288$ .

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 2 Medium*

*Topic: Special Rules Relating to Cost Recovery*

66. Billie Bob purchased a used computer (5-year property) for use in his sole proprietorship in the prior year. The basis of the computer was \$2,400. Billie Bob used the computer in his business 60 percent of the time during the first year. During the second year, Billie Bob used the computer 40 percent for business use. Calculate Billie Bob's depreciation expense during the second year assuming the sole proprietorship had a loss during the year (Billie Bob did not place the asset in service in the last quarter):
- A. \$0
  - B. \$48
  - C. \$192
  - D. \$336
  - E. None of these

Because the listed property's business use drops below 50%, the straight-line method must be used and all prior years' excess depreciation must be recaptured. The asset's recovery period is 5 years and the half-year convention applies. The calculation for the current year's depreciation before adjusting for the prior year is  $\$2,400 \times .2 \times 40\% = \$192$ . But he must recapture prior depreciation of \$144 ( $\$2,400 \times .2 \times 60\% = \$288$  taken less \$144 (straight-line,  $\frac{1}{2}$  year)) that would have been taken. Therefore, the current year depreciation expense is  $\$192 - \$144 = \$48$ .

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 3 Hard*

*Topic: Special Rules Relating to Cost Recovery*



67. Which of the following assets is eligible for bonus depreciation?

- A. Used office machinery
- B. Qualified leasehold improvements
- C. A new delivery truck
- D. Used office furniture
- E. All of these

Only new personal property is eligible for bonus depreciation. Real property and used property are not eligible.

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 1 Easy*

*Topic: Special Rules Relating to Cost Recovery*

68. Potomac LLC purchased an automobile for \$30,000 on August 5, 2016. What is Potomac's depreciation expense for 2016? (ignore any possible bonus depreciation)

- A. \$3,160
- B. \$4,287
- C. \$6,000
- D. \$30,000
- E. None of these

A luxury auto's maximum depreciation in the first year is \$3,160 for 2016.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

69. Arlington LLC purchased an automobile for \$40,000 on July 5, 2016. What is Arlington's depreciation expense for 2016 if its business use percentage is 75 percent? (ignore any possible bonus depreciation)
- A. \$2,370
  - B. \$3,160
  - C. \$6,000
  - D. \$8,000
  - E. None of these

A luxury auto's maximum depreciation in the first year is  $\$3,160 \times 75\% = \$2,370$ .

AACSB: Analytical Thinking

AICPA: BB Critical Thinking

Accessibility: Keyboard Navigation

Blooms: Analyze

Blooms: Apply

Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.

Level of Difficulty: 2 Medium

Topic: Special Rules Relating to Cost Recovery

70. Assume that Bethany acquires a competitor's assets on March 31<sup>st</sup>. The purchase price was \$150,000. Of that amount, \$125,000 is allocated to tangible assets and \$25,000 is allocated to goodwill (a §197 intangible asset). What is Bethany's amortization expense for the current year, rounded to the nearest whole number?

- A. \$0
- B. \$1,250
- C. \$1,319
- D. \$1,389
- E. None of these

The full-month convention applies. §197 assets have a recovery period of 180 months. The amortization is \$1,389 ( $\$25,000/180 \times 12$ ).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 2 Medium*

*Topic: Amortization*

71. Assume that Brittany acquires a competitor's assets on September 30<sup>th</sup> of year 1 for \$350,000. Of that amount, \$300,000 is allocated to tangible assets and \$50,000 is allocated equally to two §197 intangible assets (goodwill and a 1-year non-compete agreement). Given, that the non-compete agreement expires on September 30<sup>th</sup> of year 2, what is Brittany's amortization expense for the second year, rounded to the nearest whole number?
- A. \$0
  - B. \$1,667
  - C. \$2,917
  - D. \$3,333
  - E. None of these

The full-month convention applies. If a §197 asset is disposed of before it is fully recovered, the remaining basis is added to the remaining §197 assets acquired at the same time. §197 assets have a recovery period of 180 months. The amortization is \$3,333 ( $\$50,000/180 \times 12$ ). The result is as if the asset never expired.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 2 Medium*

*Topic: Amortization*

72. Jasmine started a new business in the current year. She incurred \$10,000 of start-up costs. How much of the start-up costs can be immediately expensed (excluding amounts amortized over 180 months) for the year?

- A. \$0
- B. \$2,500
- C. \$5,000
- D. \$10,000
- E. None of these

\$5,000 of start-up expenses can be immediately expensed. The \$5,000 maximum phases out dollar for dollar if more than \$50,000 of start-up costs are incurred.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 1 Easy*

*Topic: Amortization*

73. Racine started a new business in the current year. She incurred \$52,000 of start-up costs. If her business started on November 23<sup>rd</sup> of the current year, what is the total expense she may deduct with respect to the start-up costs for her initial year, rounded to the nearest whole number?

- A. \$2,555
- B. \$3,544
- C. \$5,522
- D. \$52,000
- E. None of these

The maximum immediate expense amount of \$5,000 phases out dollar for dollar if more than \$50,000 of start-up costs are incurred. Thus, the immediate expensing is \$3,000 (\$5,000 - (\$52,000 - \$50,000)). The remaining amount is amortized over 180 months and results in an additional deduction of \$544  $[(\$49,000/180) \times 2 \text{ months}]$  for the year.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 2 Medium*

*Topic: Amortization*

74. Daschle LLC completed some research and development during June of the current year. The related costs were \$60,000. If Daschle wants to capitalize and amortize the costs as quickly as possible, what is the total amortization expense Daschle may deduct during the current year?
- A. \$0
  - B. \$6,500
  - C. \$7,000
  - D. \$12,000
  - E. None of these

The amortization when capitalization is elected is \$7,000 ( $\$60,000/60$ )  $\times$  7 months. The amortization period on capitalized research and development is not less than 60 months—and 60 months is the most often elected.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 1 Easy*

*Topic: Amortization*

75. Jorge purchased a copyright for use in his business in the current year. The purchase occurred on July 15<sup>th</sup> and the purchase price was \$75,000. If the patent has a remaining life of 75 months, what is the total amortization expense Jorge may deduct during the current year?

- A. \$0
- B. \$5,500
- C. \$6,000
- D. \$12,000
- E. None of these

The amortization is \$6,000  $(\$75,000/75) \times 6$ . The amortization period on a purchased patent is the asset's remaining useful life.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 1 Easy*

*Topic: Amortization*



76. Geithner LLC patented a process it developed in the current year. The patent is expected to create benefits for Geithner over a 10-year period. The patent was issued on April 15<sup>th</sup> and the legal costs associated with the patent were \$43,000. In addition, Geithner had unamortized research expenditures of \$15,000 related to the process. What is the total amortization expense Geithner may deduct during the current year?
- A. \$2,417
  - B. \$2,174
  - C. \$4,108
  - D. \$4,350
  - E. None of these

The amortization is \$4,350 ( $\$58,000/120 \times 9$  months). The amortization period is the shorter of the patent's legal (20 years for utility patents) or useful life (10 years).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 1 Easy*

*Topic: Amortization*

77. Santa Fe purchased the rights to extract turquoise on a tract of land over a five-year period. Santa Fe paid \$300,000 for extraction rights. A geologist estimates that Santa Fe will recover 5,000 pounds of turquoise. During the current year, Santa Fe extracted 1,500 pounds of turquoise, which it sold for \$200,000. What is Santa Fe's cost depletion expense for the current year?
- A. \$60,000
  - B. \$90,000
  - C. \$110,000
  - D. \$300,000
  - E. None of these

The depletion expense is \$90,000 ( $\$300,000/5,000 \times 1,500$ ).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 1 Easy*

*Topic: Depletion*

78. Santa Fe purchased the rights to extract turquoise on a tract of land over a five-year period. Santa Fe paid \$300,000 for extraction rights. A geologist estimated that Santa Fe will recover 5,000 pounds of turquoise. During the past several years, 4,000 pounds were extracted. During the current year, Santa Fe extracted 1,500 pounds of turquoise, which it sold for \$250,000. What is Santa Fe's cost depletion expense for the current year?
- A. \$60,000
  - B. \$90,000
  - C. \$190,000
  - D. \$160,000
  - E. None of these

The depletion expense is \$60,000 ( $\$300,000 / 5,000 \times 1,000$ ). Cost depletion is limited to the taxpayer's basis. As a result, even though 1,500 pounds were extracted, only 1,000 pounds can be expensed under cost depletion.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 1 Easy*

*Topic: Depletion*

79. Lucky Strike Mine (LLC) purchased a silver deposit for \$1,500,000. It estimated it would extract 500,000 ounces of silver from the deposit. Lucky Strike mined the silver and sold it reporting gross receipts of \$1.8 million, \$2.5 million, and \$2 million for years 1 through 3, respectively. During years 1 - 3, Lucky Strike reported net income (loss) from the silver deposit activity in the amount of (\$100,000), \$400,000, and \$100,000, respectively. In years 1 - 3, Lucky Strike actually extracted 300,000 ounces of silver as follows:

Ounces extracted per year		
Year 1	Year 2	Year 3
50,000	150,000	100,000

What is Lucky Strike's depletion expense for year 2 if the applicable percentage depletion for silver is 15 percent?

- A. \$200,000
- B. \$375,000
- C. \$400,000
- D. \$450,000
- E. None of these

The depletion expense is \$450,000, the greater of cost or percentage depletion. Cost depletion is \$450,000  $(\$1,500,000/500,000) \times 150,000$ . Percentage depletion is \$200,000; the lesser of the statutory percentage \$375,000  $(\$2,500,000 \times .15)$  or \$200,000  $[(\$400,000 \times 50\%) = 50 \text{ percent of net income}]$ .

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 2 Medium*

*Topic: Depletion*

## Essay Questions

80. Janey purchased machinery on April 8<sup>th</sup> of the current year. The relevant costs for the year are as follows: machinery for \$10,000, \$800 shipping, \$50 for delivery insurance, \$500 for installation, \$750 for sales tax, \$150 for the annual tune up, and \$200 of property taxes (an annual tax on business property). What is Janey's tax basis for the machinery?

\$12,100

Feedback: An asset's basis consists of all of the costs to purchase, install, and place the asset in service. The annual tune up is routine maintenance and the annual property tax is a general business expense. ( $\$10,000 + 800 + 50 + 500 + 750$ )

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

81. Jaussi purchased a computer several years ago for \$2,200 and used it for personal purposes. On November 10<sup>th</sup> of the current year, when the fair market value of the computer was \$800, Jaussi converted it to business use. What is Jaussi's tax basis for the computer?

\$800

Feedback: When personal property is converted to business use, the basis is the lesser of the cost basis of the property or the fair market value on the date of the conversion.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-01 Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.*

*Level of Difficulty: 1 Easy*

*Topic: Cost Recovery and Basis for Cost Recovery*

82. Flax, LLC purchased only one asset this year. Flax placed in service a computer (5-year property) on January 16 with a basis of \$14,000. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation).

\$2,800

Feedback: The asset's recovery period is 5 years and the half-year convention applies since less than 40 percent of the property was placed in service during the fourth quarter. The calculation is  $\$14,000 \times .2 = \$2,800$ .

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

83. Roth, LLC purchased only one asset during the current year. Roth placed in service computer equipment (5-year property) on November 1<sup>st</sup> with a basis of \$42,500. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation).

\$2,125

Feedback: The asset's recovery period is 5 years and the mid-quarter convention applies since more than 40 percent of the property was placed in service during the fourth quarter. The calculation is  $\$42,500 \times .05 = \$2,125$ .

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

84. Eddie purchased only one asset during the current year. Eddie placed in service furniture (7-year property) on May 1<sup>st</sup> with a basis of \$26,500. Calculate the maximum depreciation expense, rounded to the nearest whole number (ignoring §179 and bonus depreciation).

\$3,787

Feedback: The asset's recovery period is 7 years and the half-year convention applies since less than 40 percent of the property was placed in service during the fourth quarter. The calculation is  $\$26,500 \times .1429 = \$3,787$ .

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

85. Teddy purchased only one asset during the current year. Teddy placed in service machinery (7-year property) on October 1<sup>st</sup> with a basis of \$76,500. Calculate the maximum depreciation expense, rounded to the nearest whole number (ignoring §179 and bonus depreciation).

\$2,731

Feedback: The asset's recovery period is 7 years and the mid-quarter convention applies since more than 40 percent of the property was placed in service during the fourth quarter. The calculation is  $\$76,500 \times .0357 = \$2,731$ .

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

86. Amit purchased two assets during the current year. Amit placed in service computer equipment (5-year property) on April 16<sup>th</sup> with a basis of \$5,000 and furniture (7-year property) on September 9<sup>th</sup> with a basis of \$20,000. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation).

\$3,858

Feedback: The half-year convention applies since less than 40 percent of the property was placed in service during the fourth quarter. The calculations are  $\$5,000 \times .2 = \$1,000$  and  $\$20,000 \times .1429 = \$2,858$ . The total is \$3,858 ( $\$1,000 + \$2,858$ ).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*



87. Yasmin purchased two assets during the current year. Yasmin placed in service computer equipment (5-year property) on May 26<sup>th</sup> with a basis of \$10,000 and machinery (7-year property) on December 9<sup>th</sup> with a basis of \$10,000. Calculate the maximum depreciation expense (ignoring §179 and bonus depreciation).

\$2,857

Feedback: The mid-quarter convention applies since more than 40 percent of the property was placed in service during the fourth quarter. The calculations are  $\$10,000 \times .25 = \$2,500$  and  $\$10,000 \times .0357 = \$357$ . The total is \$2,857 ( $\$2,500 + \$357$ ).

AACSB: Analytical Thinking

AICPA: BB Critical Thinking

Blooms: Analyze

Blooms: Apply

Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.

Level of Difficulty: 2 Medium

Topic: Depreciation

88. Bonnie Jo used two assets during the current year. The first was computer equipment with an original basis of \$15,000, currently in the second year of depreciation, and under the half-year convention. This asset was disposed of on October 1<sup>st</sup> of the current year. The second was furniture with an original basis of \$24,000 placed in service during the first quarter, currently in the fourth year of depreciation, and under the mid-quarter convention. What is Bonnie Jo's depreciation expense for the current year, rounded to the nearest whole number?

\$5,023

Feedback: The depreciation expense for the current year is \$5,023. The calculations are  $\$15,000 \times .32 \times \frac{1}{2} \text{ year} = \$2,400$  and  $\$24,000 \times .1093 = \$2,623$ . The total is \$5,023 ( $\$2,400 + \$2,623$ ).

AACSB: Analytical Thinking

AACSB: Reflective Thinking

AICPA: BB Critical Thinking

Blooms: Analyze

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

89. Kristine sold two assets on March 20<sup>th</sup> of the current year. The first was machinery with an original basis of \$51,000, currently in the fourth year of depreciation, and under the half-year convention. The second was furniture with an original basis of \$16,000 placed in service during the fourth quarter, currently in the third year of depreciation, and under the mid-quarter convention. What is Kristine's depreciation expense for the current year, rounded to the nearest whole number?

\$3,579

Feedback: The depreciation on those assets are  $\$51,000 \times .1249 \times \frac{1}{2} \text{ year} = \$3,185$  and  $\$16,000 \times .1968 \times 1.5/12 = \$394$ , the total is \$3,579 (\$3,185 + \$394).

AACSB: Analytical Thinking

AACSB: Reflective Thinking

AICPA: BB Critical Thinking

Blooms: Analyze

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

90. Timothy purchased a new computer for his consulting practice on October 15<sup>th</sup> of the current year. The basis of the computer was \$4,000. During the Thanksgiving holiday, he decided the computer didn't meet his business needs and gave it to his college-aged son in another state. The computer was never used for business purposes again. Timothy had \$50,000 of taxable income before depreciation. What is Timothy's total cost recovery expense with respect to the computer during the current year?

\$0

Feedback: No depreciation expense or \$179 expense may be taken on an asset which is acquired by and disposed of during the same taxable year.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 1 Easy*

*Topic: Depreciation*

91. During August of the prior year, Julio purchased an apartment building that he used as a rental property. The basis was \$1,400,000. Calculate the maximum depreciation expense during the current year.

\$50,904

Feedback: The asset's recovery period is 27.5 years and the mid-month convention applies for real property. The calculation is  $\$1,400,000 \times .03636 = \$50,904$ .

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

92. During April of the current year, Ronen purchased a warehouse that he used for business purposes. The basis was \$1,600,000. Calculate the maximum depreciation expense during the current year.

\$29,104

Feedback: The asset's recovery period is 39 years and the mid-month convention applies for real property. The calculation is  $\$1,600,000 \times .01819 = \$29,104$ .

AACSB: Analytical Thinking

AACSB: Reflective Thinking

AICPA: BB Critical Thinking

Blooms: Analyze

Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.

Level of Difficulty: 1 Easy

Topic: Depreciation

93. An office building was purchased on December 9<sup>th</sup> several years ago for \$2,500,000. The purchase price was allocated as follows: building \$1,900,000, landscaping \$100,000, and land \$500,000. During the current year, the 10<sup>th</sup> year, the building was sold on March 10<sup>th</sup>. Calculate the maximum depreciation expense for the real property during the current year, rounded to the nearest whole number.

\$10,149

Feedback: The asset's recovery period is 39 years and the mid-month convention applies for real property. The calculation is  $\$1,900,000 \times .02564 \times (2.5/12) = \$10,149$ . Depreciation is allowed for 2.5 months in the year of disposal. The land improvements are not considered to be real property. The land is non-depreciable.

AACSB: Analytical Thinking

AACSB: Reflective Thinking

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Level of Difficulty: 2 Medium*

*Topic: Depreciation*

94. Olney LLC only purchased one asset this year. Olney LLC placed in service on July 19, 2016 machinery and equipment (7-year property) with a basis of \$850,000. Assume that Olney has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing, rounded to the nearest whole number (but ignoring bonus expensing). Assume the 2015 §179 limits are identical to 2016.

\$550,015

Feedback: The \$500,000 §179 expense is not limited. The half year convention applies. The expense is \$550,015 which is depreciation of  $\$350,000 \times .1429 = \$50,015$  + \$500,000 of §179 expense.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 2 Medium*

*Topic: Special Rules Relating to Cost Recovery*

95. Columbia LLC only purchased one asset this year. Columbia LLC placed in service on October 9, 2016 machinery and equipment (7-year property) with a basis of \$2,150,000. Assume that Columbia has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (but ignoring bonus expensing) for the year, rounded to the nearest whole number. Assume the 2015 §179 limits are identical to 2016.

\$414,260

Feedback: The \$500,000 §179 expense is limited to \$350,000 because of the property placed in service limitation (\$500,000 - (\$2,150,000 - \$2,000,000)). The mid-quarter convention applies. The expense is \$414,260 which is depreciation of  $\$1,800,000 \times .0357 = \$64,260$  + \$350,000 of §179 expense.

*AACSB: Analytical Thinking*

*AACSB: Reflective Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 2 Medium*

*Topic: Special Rules Relating to Cost Recovery*

96. Northern LLC only purchased one asset this year. In 2016, Northern LLC placed in service on September 6<sup>th</sup> machinery and equipment (7-year property) with a basis of \$2,200,000. Assume that Northern has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (ignore any potential bonus expensing), rounded to the nearest whole number. Assume the 2015 §179 limits are identical to 2016.

\$571,510

Feedback: The \$500,000 §179 expense is reduced to \$300,000 because of the property placed in service limitation ( $\$500,000 - (\$2,200,000 - \$2,000,000)$ ). The half-year convention applies. The expense is \$571,510 which is depreciation of  $\$1,900,000 \times .1429 = \$271,510 + \$300,000$  of §179 expense.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 3 Hard*

*Topic: Special Rules Relating to Cost Recovery*

97. Reid acquired two assets in 2016: computer equipment (5-year property) acquired on August 6<sup>th</sup> with a basis of \$500,000 and machinery (7-year property) on November 9<sup>th</sup> with a basis of \$500,000. Assume that Reid has sufficient income to avoid any limitations. Calculate the maximum depreciation expense including §179 expensing (but not bonus expensing). Assume the 2015 §179 limits are identical to 2016.

\$600,000

Feedback: The \$500,000 §179 expense should be used for the asset with the lowest first year depreciation percentage; therefore, Reid expenses the machinery using §179 of \$500,000. The mid-quarter convention will no longer apply once the machinery is expensed because the determination of the convention occurs after the basis reduction from the §179 expensing. Reid then uses the half-year convention to depreciate the computer equipment. The cost recovery for the equipment is \$100,000 ( $\$500,000 \times .2$ ) resulting in a total depreciation expense of \$600,000 (\$500,000 machinery + \$100,000 computer equipment). Choosing to use the §179 immediate expensing option on the 7-year property results in accelerated depreciation compared to choosing the 5-year property.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 2 Medium*

*Topic: Special Rules Relating to Cost Recovery*



98. Phyllis purchased \$8,000 of specialized audio equipment that she uses in her business regularly. Occasionally, she uses the equipment for personal use. During the first year, Phyllis used the equipment for business use 70 percent of the time; however, during the current (second) year the business use fell to 40 percent. Assume that the equipment is seven-year MACRS property and is under the half-year convention. Assume the ADS recovery period is 10 years. What is the depreciation allowance for the current year, rounded to the nearest whole number?

Phyllis must recapture \$200 into income this year.

Feedback: Because the business use fell below 50 percent for the listed property, the depreciation for all years must be recalculated under the straight-line method over the ADS recovery period. During the first year depreciation was \$800 ( $\$8,000 \times .1429 \times 70\%$ ). Using the straight-line method over the ADS recovery period the depreciation for year 1 would be \$280 ( $\$8,000/10 \text{ years} \times 70\% \times \frac{1}{2} \text{ year}$ ). Depreciation for year 2 would be \$320 ( $\$8,000/10 \text{ years} \times 40\%$ ). Because the actual depreciation taken in year 1 exceeds the sum of the depreciation for years 1 and 2 under the ADS method, Phyllis must actually recapture \$200 into income during the current year.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 3 Hard*

*Topic: Special Rules Relating to Cost Recovery*

99. Alexandra purchased a \$35,000 automobile during 2016. The business use was 70 percent. What is the allowable depreciation for the current year? (ignore any possible bonus depreciation)

\$2,212

Feedback: The maximum depreciation for a luxury automobile during 2016 is \$3,160. Because the business use was 70 percent, depreciation is \$2,212 ( $\$3,160 \times 70\%$ ).

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (\$179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 1 Easy*

*Topic: Special Rules Relating to Cost Recovery*

100. Boxer LLC has acquired various types of assets recently used 100% in its trade or business. Below is a list of assets acquired during 2015 and 2016:

Asset	Cost Basis	Convention	Date Placed in Service
Machinery	25,000	Half year	January 24, 2015
Warehouse	800,000	Mid month	August 1, 2015
Furniture	100,000		October 5, 2016
Computer equipment	65,000		October 10, 2016
Office equipment	34,000		September 28, 2016
Automobile	35,000		July 15, 2016
Office building	800,000		September 24, 2016

Boxer did not elect §179 expense and elected out of bonus depreciation in 2015, but would like to elect §179 expense for 2016 (assume that taxable income is sufficient). Calculate Boxer's maximum depreciation expense for 2016, rounded to the nearest whole number (ignore bonus depreciation for 2016). If necessary, use the 2015 luxury automobile limitation amount for 2016 and assume that the 2015 §179 limits are identical to 2016.

\$234,787

Feedback: §179 allows expensing of all the 2016 tangible personal property (\$199,000 = \$100,000 + \$65,000 + \$34,000), with the exception of the automobile. The maximum depreciation for 2016 on luxury automobiles is \$3,160. The depreciation of the remaining assets is as follows: 2015 machinery ( $\$25,000 \times .2449 = \$6,123$ ), 2015 warehouse ( $\$800,000 \times .02564 = \$20,512$ ), and the 2016 office building ( $\$800,000 \times .00749 = \$5,992$ ).

Asset	2016 Depreciation
Machinery	6,123

Warehouse	20,512
Furniture	100,000
Computer equipment	65,000
Office equipment	34,000
Automobile	3,160
Office building	<u>5,992</u>
Total	<u>\$234,787</u>

AACSB: Analytical Thinking

AACSB: Reflective Thinking

AICPA: BB Critical Thinking

Blooms: Analyze

*Learning Objective: 02-02 Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.*

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 3 Hard*

*Topic: Depreciation*

*Topic: Special Rules Relating to Cost Recovery*

101. Assume that Yuri acquires a competitor's assets on May 1<sup>st</sup>. The purchase price was \$500,000. Of the amount, \$325,000 is allocated to tangible assets and \$175,000 is allocated to goodwill (a §197 intangible asset). What is Yuri's amortization expense for the current year, rounded to the nearest whole number?

\$7,778

Feedback: The full-month convention applies. §197 assets have a recovery period of 180 months. The amortization is  $\$7,778 = (\$175,000/180) \times 8$ .

AACSB: Analytical Thinking

AACSB: Reflective Thinking

AICPA: BB Critical Thinking

Blooms: Analyze

*Learning Objective: 02-03 Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.*

*Level of Difficulty: 1 Easy*

*Topic: Special Rules Relating to Cost Recovery*



102. Assume that Cannon LLC acquires a competitor's assets on June 15<sup>th</sup> of a prior year. The purchase price was \$450,000. Of the amount, \$196,200 is allocated to tangible assets and \$253,800 is allocated to three \$197 intangible assets: \$153,000 to goodwill, \$50,400 to a customer list with an expected life of 8 years, and \$50,400 to a 3 year non-compete agreement. On May 30<sup>th</sup> of the second year, the customer list is sold for \$10,000. Please round your amortization amounts to the nearest whole number. Round your allocation percentage to the nearest whole percentage (e.g., .1234 as 12%).

- 1) What is Cannon's amortization expense for the second year?
- 2) What is the basis of the intangibles at the end of the second year?

1) Cannon's amortization expense for the second year is \$16,500. This is calculated as follows:

	Goodwill	Covenant	Customer List	Total
Initial basis	\$153,000	\$50,400	\$50,400	
Recovery Period, months	180	180	180	
Per month	\$850	\$280	\$280	
Year 1, 7 months	\$5,950	\$1,960	\$1,960	
Year 2, 5 months	\$4,250	\$1,400	\$1,400	\$7,050
Basis, May 30, Year 2	\$142,800	\$47,040	\$47,040	
Selling price			(\$10,000)	
Remaining basis	\$142,800	\$47,040	\$37,040	
Reallocation pro rata on \$189,840 (Goodwill and	\$27,780	\$9,260	(\$37,040)	

covenant) 75%, 25%				
Reallocated basis	\$170,580	\$56,300	\$0	
Remaining months	168	168		
Per month, rounded	\$1,015	\$335		
June-Dec (7 months)	\$7,105	\$2,345		\$9,450
Total amortization, Year 2	\$11,355	\$3,745	\$1,400	\$16,500

2) The basis of the remaining assets is as follows:

	Goodwill	Covenant
Initial basis	\$153,000	\$50,400
Amortization Year 1, 7 months	(5,950)	(1,960)
Amortization Year 2, 5 months	(4,250)	(1,400)
Reallocated basis, May 30, Year 2	27,780	9,260
Amortization Year 2, 7 months	(7,105)	(2,345)
Basis, end of Year 2	\$163,475	\$53,955

AACSB: Analytical Thinking

AICPA: BB Critical Thinking

Blooms: Analyze

Blooms: Apply

Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.

Level of Difficulty: 3 Hard

Topic: Amortization

103. Oksana started an LLC on November 2 of the current year. She incurred \$30,000 of start-up costs. How much of the start-up costs can be immediately expensed for the year? How much amortization may Oksana deduct in the first year?

\$5,278

Feedback: \$5,000 of start-up expenses can be immediately expensed and \$278 ( $\$25,000/180$ )  $\times$  2 months of amortization may be deducted.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 2 Medium*

*Topic: Amortization*

104. Putin Corporation began business on September 23<sup>rd</sup> of the current year. It incurred \$40,000 of start-up costs and \$60,000 of organizational expenditures. How much total amortization may be deducted in the first year, rounded to the nearest whole number?

\$7,111

Feedback: Total amortization is \$7,111. \$5,000 of start-up expenses can be immediately expensed. Putin may not immediately expense the organizational costs because the immediate expensing is phased out dollar for dollar for organization expenditures exceeding \$50,000. As a result when the expenses exceed \$55,000, no immediate expensing can be taken. In addition,  $\$2,111 (\$35,000/180) \times 4 \text{ months} = \$778$  of the start-up costs may be amortized and  $(\$60,000/180) \times 4 \text{ months} = \$1,333$  of the organizational expenditures may be amortized.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible*



*assets, and calculate amortization expense.*

*Level of Difficulty: 2 Medium*

*Topic: Amortization*

105. Paulsen incurred \$55,000 of research and experimental expenses and began amortizing them over 60 months during June of year 1. During May of year 3, Paulsen received a patent based upon the research being amortized. \$36,000 of legal expenses for the patent was incurred. The patent is expected to have a remaining useful life of 17 years.

- 1) What is the basis of the patent, rounding amortization for each year to the nearest whole number?
- 2) What is the amortization expense with respect to the patent during the year it was issued, rounded to the nearest whole number?

1) \$69,000

Feedback: The basis of the patent is \$69,000 (\$36,000 of legal costs and \$33,000 of unamortized research expenses). The research expense is  $\$55,000/60 \text{ months} = \$916.67$ . Year 1 is \$6,417 for 7 months; year 2 is a full year of \$11,000, and 5 months in year 3 is \$4,583. Total research expensed is \$22,000 and remaining unamortized expense to add to patent capitalization is \$33,000.

2) \$2,368

Feedback: The amortization is  $\$2,368 = (\$69,000/204 \text{ months}) \times 7 \text{ months in year 3}$ .

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-04 Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.*

*Level of Difficulty: 3 Hard*

*Topic: Amortization*

106. Sequoia purchased the rights to cut timber on several tracts of land over a fifteen-year period. It paid \$500,000 for cutting rights. A timber engineer estimates that 500,000 board feet of timber will be cut. During the current year, Sequoia cut 45,000 board feet of timber, which it sold for \$900,000. What is Sequoia's cost depletion expense for the current year?

\$45,000

Feedback: The depletion expense is \$45,000 ( $\$500,000/500,000$ )  $\times$  45,000.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 1 Easy*

*Topic: Depletion*

107. PC Mine purchased a platinum deposit for \$3,500,000. It estimated it would extract 17,000 ounces of platinum from the deposit. PC mined the platinum and sold it reporting gross receipts of \$500,000 and \$8 million for years 1 and 2, respectively. During years 1 and 2, PC reported net income (loss) from the platinum deposit activity in the amount of (\$100,000) and \$3,800,000, respectively. In years 1 and 2, PC actually extracted 2,000 and 8,000 ounces of platinum. What is PC's depletion expense for years 1 and 2 if the applicable percentage depletion for platinum is 22 percent, rounded to the nearest whole number?

Year 1: \$411,765

Year 2: \$1,760,000

Feedback: PC has cost depletion expense of \$411,765 ( $\$3,500,000/17,000$ )  $\times$  2,000 in year 1. Because PC has a loss in year 1, there is no percentage depletion. PC has percentage depletion of \$1,760,000 in year 2: the lesser of \$1,760,000 ( $\$8 \text{ million} \times 22 \text{ percent}$ ) or \$1,900,000 ( $\$3.8 \text{ million} \times 50 \text{ percent}$ ). Cost depletion was \$1,647,059 ( $\$3,500,000/17,000$ )  $\times$  8,000 and is less than percentage depletion.

*AACSB: Analytical Thinking*

*AICPA: BB Critical Thinking*

*Blooms: Analyze*

*Blooms: Apply*

*Learning Objective: 02-05 Explain cost recovery of natural resources and the allowable depletion methods.*

*Level of Difficulty: 2 Medium*

*Topic: Depletion*