

## CHAPTER 10

### COST RECOVERY ON PROPERTY

2017 Edition	Topic	Status
<b>Questions</b>		
1	Effect of capital recovery on return on investment	Unchanged
2	Two tests which must be meet to claim cost recovery on a capital expenditure	Unchanged
3	Types of capital expenditures not eligible for periodic cost recovery	Unchanged
4	Define depreciable basis	Unchanged
5	Why did Congress change from fact and circumstances method to ACRS	Unchanged
6	Types of property eligible for Section 179 deduction	Unchanged
7	Limitations on amount of Section 179 deduction	Unchanged
8	What type of businesses can elect Section 179	Unchanged
9	When is accelerated depreciation under MACRS not beneficial	Unchanged
10	What is the purpose of the acquisition/disposition conventions	Unchanged
11	What acquisition/disposition conventions apply to MACRS property	Unchanged
12	Efficiency of MACRS depreciation calculation versus facts and circumstances method	Unchanged
13	Difference between ADS depreciation and straight-line under MACRS	Unchanged
14	Benefit of using ADS	Unchanged
15	Restrictions placed on cost recovery of listed property	Unchanged
16	Cost recovery limits on automobiles	Unchanged
17	Types of property eligible for depletion	Unchanged
18	Compare cost depletion with percentage depletion	Unchanged
19	Tax concepts violated by depletion	Unchanged

<b>2017 Edition</b>	<b>Topic</b>	<b>Status</b>
20	Cost recovery for intangibles	Unchanged
<b>Problems</b>		
21	Determine which assets are not subject to cost recovery - ten scenarios	Unchanged
22	Repair expense vs. capitalized expenditure - five scenarios	Unchanged
23	Capital expenditure versus current expense - five scenarios	Unchanged
24	Maximum Section 179 deduction for five different entities	Modified
25	Examination of Section 179 deduction - three scenarios	Modified
26	Section 179 deduction and the annual investment limitation	Modified
27	Section 179 deduction and the taxable income limitation - two scenarios	Modified
28	Section 179 deduction and the taxable income limitation	Modified
29	Impact of conduit entity Section 179 deduction on taxpayer's use of Section 179 deduction	Modified
<b>30-COMM</b>	Impact of conduit entity Section 179 deduction on taxpayer's use of Section 179 deduction	Modified
31	Determine depreciable basis - four scenarios	Unchanged
32	Determine depreciable basis - four scenarios	Unchanged
33	Use Chapter Appendix to determine asset class lives, MACRS, recovery period, and ADS recovery period - eight assets	Unchanged
34	Use Chapter Appendix to determine asset class lives, MACRS recovery period, and ADS recovery period - eight assets	Unchanged
35	Refers to problem 34 Determine IRS percentage table, recovery period, and convention	Unchanged
36	Determine IRS percentage table, recovery period, and convention - six assets	Unchanged
37	Calculate maximum MACRS depreciation on personal property	Modified
38	Calculate gain on sale on personal property asset (refers to #37)	Unchanged

<b>2017 Edition</b>	<b>Topic</b>	<b>Status</b>
39	Calculate maximum MACRS depreciation on personal property without Section 179 election and sale of asset	Unchanged
40	Calculate depreciation using mid-quarter convention	Unchanged
41	Maximum and minimum MACRS deduction (impact of Section 179 election)	Modified
42	Maximum MACRS deduction/impact of Section 179 rules (taxable income limitation)	Unchanged
43	Maximum MACRS deduction/impact of Section 179 rules (taxable income limitation)	Modified
44	Maximum and minimum MACRS deduction (impact of Section 179 election)	Modified
45	Maximum MACRS deduction with different class life assets/impact of Section 179	Modified
46	Maximum MACRS deduction with different class life assets/impact of Section 179	Modified
47	Impact of the mid-quarter convention on the MACRS deduction	Modified
48	Gain/loss on sale of MACRS asset- two scenarios: maximum cost recovery vs. minimum (refers to Chapter 11, #63)	Modified
49	Compare depreciation using maximum, minimum, and intermediate methods	Modified
50	Compare depreciation using maximum, minimum, and intermediate methods	Modified
51	Compare depreciation MACRS and ADS 7 –year property (related to #77 and #78 in Chapter 15)	Unchanged
52	Cost recovery of non-residential realty - two scenarios (1992, 1994)	Unchanged
53	Sale of non-residential realty - two scenarios (1992, 1994) refers to #52	Unchanged
54	Cost recovery and subsequent sale of both residential and non-residential real property purchased 5/4/93 (refers to Chapter 11, #67)	Unchanged

<b>2017 Edition</b>	<b>Topic</b>	<b>Status</b>
55	Cost recovery and subsequent sale of both residential and non-residential real property purchased after 5/12/93	Modified
56	Maximum cost recovery on listed property - automobile	Unchanged
57	Listed property (automobile) with more than 50% business use	Unchanged
58	Compare cost depletion versus percentage depletion	Unchanged
<b>59-COMM</b>	Compare cost depletion versus percentage depletion	Unchanged
<i>60-CT</i>	Amortization of purchased intangibles - maximum versus minimum	Modified
61	Amortization of assets including intangibles	Unchanged
62	Amortization of patent	Unchanged
63	Date asset placed in service	Unchanged
64	House qualifies as rental property	Unchanged
65	Useful life of an asset	Modified
66	Maximum amount of depreciation	Unchanged
67	Eligible for Section 179 deduction	Unchanged
68	Useful life of patent	Unchanged
69	TAX SIMULATION	Unchanged
70	INTERNET	Unchanged
71	INTERNET	Unchanged
72	Research Problem	Unchanged
73	Research Problem	Unchanged
<b>74-INT</b>	Integrative problem/depreciation and amortization of assets introduced in Chapter 9, #87	Unchanged
<b>75-COMM</b>	Integrative problem/maximum cost recovery of multiple asset purchases	Unchanged
<i>76-DC-CT</i>	Is a classical musical instrument a depreciable asset?	Unchanged
<i>77DC-CT</i>	Four different methods of cost recovery	Unchanged

<b>2017 Edition</b>	<b>Topic</b>	<b>Status</b>
<b>78-TPC- COMM</b>	Timing of personal property acquisition and the mid-quarter convention	Unchanged
<b>79-TPC- COMM</b>	Comparison of real after-tax cost of using MACRS versus straight-line depreciation	Unchanged
<b>80-EDC- COMM</b>	Personal use of listed property - focuses on SSTS #6	Unchanged

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## CHAPTER 10

### COST RECOVERY ON PROPERTY

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#### DISCUSSION QUESTIONS

1. How does the allowable capital recovery period affect the potential return on the investment in an asset?

**The period in which capital can be recovered affects the return on an investment in an asset through the tax savings the deduction provides. The time value of money factor makes earlier capital recovery (i.e., earlier tax savings) more valuable. Therefore, the more rapid an asset's cost can be written off, the greater the return on that asset from the tax savings generated by the deduction.**

2. Which two tests must be met to claim a periodic recovery deduction on a capital expenditure?

**To claim a periodic recovery deduction on a capital expenditure, the expenditure must be made for a business purpose (either in a trade or business or in an investment activity) and the expenditure must have a definite useful life. Assets that are used for purely personal purposes (e.g., the family automobile) or which do not have a definitive life (e.g., land) do not qualify for any periodic capital recovery deduction.**

3. What types of capital expenditures are not deductible over time (i.e., their cost is recovered upon disposition of the asset)?

**Assets that do not have a business purpose (i.e., personal use assets) and those with indefinite lives (e.g., land and securities) are not deductible until they are disposed of. Even then, the recovery on personal use assets is limited to the amount realized from the disposition (personal use losses are not deductible).**

4. What is the depreciable basis of an asset? What role does depreciable basis play in determining the annual cost recovery on a depreciable asset?

**The depreciable basis of an asset is the amount of the initial basis that is subject to recovery through depreciation. Under the MACRS depreciation system, the depreciable basis does not change throughout the tax life of the asset. Each period's depreciation is determined by multiplying the depreciable basis by the pre-determined MACRS depreciation percentage. This assures that the entire capital investment is recovered over the tax life of the asset.**

5. What was the purpose of changing from the facts and circumstances depreciation method to the ACRS method?

**The change to ACRS was done to simplify the depreciation calculation and to provide economic stimulation by accelerating the amount of the depreciation deduction. Simplification is obtained through the use of standard class lives and methods, making the depreciation calculation the same for all taxpayers. This allows the building of tables, which are used to calculate the deduction. The economic stimulation was accomplished by reducing the tax life of most properties and using accelerated methods to calculate depreciation. This has the effect of moving the cost savings from the deduction forward in time, enhancing the return on investment in depreciable assets.**

6. In general, which types of property may be expensed under Section 179, and what is the current maximum limit on the deduction?

**To be expensed under Section 179, an asset must be tangible personal property used in a trade or business. The maximum annual election to expense deduction is \$500,000 for 2016.**

7. What limitations are placed on the maximum amount to be expensed under Section 179?

**Two limitations serve to reduce the maximum election (\$500,000 in 2016) to expense amount. First, if purchases of qualifying property exceed \$2,000,000, \$1 of deduction is lost for each \$1 of purchases in excess of \$2,000,000. The amount of the election to expense that can be deducted in any year is limited to the taxpayer's total trade or business income before considering the expense deduction. Any amount elected that is not deductible under this provision may be carried forward and expensed in future years subject to the annual limitation.**

8. Is the Section 179 election to expense an incentive to all businesses to invest in qualifying property?

**The purchase limitation restricts the incentive effect of the Section 179 expense election to a business that purchases under \$2,500,000 of qualifying property during 2016. Because of the dollar for dollar phase-out of the \$500,000 expense amount when purchases exceed \$2,000,000, a business that purchases \$2,500,000 or more of qualifying property in 2016 does not benefit from the Section 179 election to expense.**

9. In general, taxpayers want to depreciate property as rapidly as possible. Under what circumstances might a taxpayer not want to use accelerated depreciation? How can this be done under MACRS?

**There are two situations in which a taxpayer may not want to use accelerated depreciation. First, if the taxpayer is experiencing losses or low current period incomes, he or she may wish to defer more of the deduction to later periods in anticipation of higher incomes. Second, the accelerated portion of the depreciation (i.e., accelerated due to method and class life) is subject to the alternative minimum tax. Thus, a taxpayer in or near an alternative minimum tax situation may find that using the accelerated MACRS depreciation is more costly.**

**Taxpayers are allowed to elect straight-line depreciation under MACRS. Depreciation can be calculated over the class life of the asset or the Alternate Depreciation System life. The ADS life is used to calculate the alternative minimum tax depreciation and is used by taxpayers desiring to avoid the alternative minimum tax.**

10. What is the purpose of the acquisition- and disposition-year convention?

**The acquisition- and disposition-year conventions determine how much of a full year's depreciation is allowed on an asset purchased or disposed of during the year. By specifying the conventions for broad classes of assets, the amount of depreciation in the year an asset is purchased or sold is uniformly determinable.**

11. What acquisition- and disposition-year conventions are used in MACRS and to what types of property does each of the conventions apply?

**Tangible personal property is subject to two conventions. The general convention for personal property is the mid-year convention. Under this convention all property is considered to be purchased and disposed of in the middle of the year. Thus, a half-year of depreciation is allowed in the year of purchase and the year of disposition. The mid-quarter convention applies to tangible personal property when more than 40% of the personal property purchases occur in the 4th quarter of the year. Under this convention, assets are grouped by the quarter of purchase and depreciated from the middle of the quarter to the end of the year.**

**Real property is subject to the mid-month convention. The mid-month convention assumes that property is purchased and disposed of in the middle of the month of acquisition or disposition. Real property is depreciated from the middle of the month of acquisition to the end of the year and from the beginning of the year to the middle of the month of disposition.**

**Note: The acquisition-year conventions are built into the depreciation tables. However, the taxpayer must make the appropriate depreciation calculation in the year of disposition.**



12. Why is the calculation of depreciation using MACRS generally considered easier and more efficient than the calculation using the facts and circumstances method?

**The use of standard class lives and depreciation methods under MACRS brings two efficiencies to the system. First, the number of disputes over depreciation lives, salvage value, and allowable methods are minimized under MACRS. This saves both administrative and taxpayer time. Second, the use of depreciation tables under MACRS greatly simplifies the depreciation calculation. This saves administrative time and taxpayer time by reducing the number of errors in the depreciation calculation.**

13. What is the Alternative Depreciation System? How is it different from a straight-line election under MACRS?

**The alternate depreciation system (ADS) is used to calculate the allowable depreciation for alternative minimum tax purposes. The ADS generally uses straight-line depreciation over longer tax lives than that for MACRS. However, tangible personal property with a class life of 3, 5, 7, or 10 years that uses regular MACRS depreciation must use 150% declining balance depreciation with optional switch to straight-line over the MACRS class life for alternative minimum tax purposes. A straight-line election can be made under MACRS to depreciate property over either the class life of the property or the ADS life. Thus, taxpayers can elect to use ADS to calculate depreciation for regular tax purposes.**

14. Why might a taxpayer elect to depreciate assets using the Alternative Depreciation System (ADS)?

**A taxpayer may elect to use the ADS for regular tax purposes because they are either close to or subject to the alternative minimum tax. Therefore, a taxpayer may be able to avoid triggering the alternative minimum tax by using ADS. Alternatively, a taxpayer already subject to the alternative minimum tax will be able to reduce their tax bill by using ADS. Also, taxpayers desiring to minimize their depreciation deductions may choose ADS.**

15. Why are restrictions placed on the cost recovery of listed property?

**Listed property (e.g., automobiles and computers) is a type of property which a taxpayer can use for both business and personal purposes. The purpose of restricting deductions on such property is to curb a perceived abuse of the deductions on such property by taxpayers. That is, the benefit of the MACRS depreciation system is only available when the property is used more than 50% of the time in a trade or business of the taxpayer.**

16. When a taxpayer purchases an automobile for use in a trade or business, what limits are placed on the cost recovery on the automobile?

**The cost-recovery deduction on automobiles is limited to the lower of the regular MACRS deduction or a prescribed amount. In most cases, the prescribed amount is less than that allowed by MACRS. The limitations are based on the year the automobile is placed in service and the limits change for each year of the life of the automobile. For example, the maximum deduction for an automobile purchased in 2015 is \$3,160. The limit must be pro-rated when the business use of the automobile is less than 100%.**

17. Which types of property are allowed a deduction for depletion?

**In order to deduct depletion, the property must be used in a trade or business or a production of income activity and the taxpayer must have an economic interest in a natural resource that is still in place on the property.**

18. How is cost depletion different from percentage depletion?

**Cost depletion is calculated using a units of production method based on the cost of the natural resource. Percentage depletion is calculated using a statutorily defined percentage multiplied by the revenue from the natural resource. Therefore, percentage depletion is not related to the cost of the resource; rather, it is a pre-specified recovery of the revenue from the resource.**

19. Which income tax concepts might taxpayers who take depletion deductions be violating?

**Two income tax concepts may be violated. First, taxpayers taking depletion deductions may use either the cost method or the percentage depletion method on a year-by-year basis. This violates the accounting method construct that requires taxpayers to select an accounting method and use that method consistently from one tax year to the next. The capital recovery concept, which limits the amount deductible to the capital invested, may also be violated. Because the percentage depletion method is not based on cost, taxpayers may continue to deduct depletion based on this method after all of the cost of the property has been recovered.**

20. How are the costs of intangible assets recovered?

**Intangible assets with a definite useful life are recovered through a straight-line amortization of the cost of the asset over its useful life. Specifically, certain intangible assets (e.g., goodwill and covenants not to compete) that are acquired in the acquisition of all the assets of a trade or business are assigned recovery periods of 15 years.**

**PROBLEMS**

21. Peter Corporation purchases the following assets during the current year. Identify which assets are not subject to cost recovery using depreciation, and state why that is so.

a. Land

**Land is not depreciable because it does not have a definite life. The investment in land is recovered when it is disposed of in a taxable transaction.**

b. Copyright

**A copyright is an intangible asset. Therefore, it does not depreciate. Rather, intangible assets with limited useful lives are amortized over its useful life. A copyright is amortized over 70 years plus the author's life.**

c. Building

**A building is tangible property that is subject to wear, tear, and obsolescence. Therefore, buildings are depreciable property.**

d. Goodwill

**Goodwill is an intangible asset. Intangible assets do not depreciate, they are amortized over the useful life of the asset. Prior to August 9, 1994, goodwill was deemed not to have a useful life and could not be amortized. The investment in goodwill was recovered when the business creating the goodwill was disposed of in a taxable transaction. Goodwill purchased after August 9, 1994, can be amortized over 15 years.**

e. Inventory for sale in its store

**Inventory is held for resale, it does not depreciate in value. Rather, the cost of the inventory is deducted against the sales price when the inventory is sold.**

f. 500 shares of Excellent common stock

**Stock does not depreciate because it does not have a definite useful life. The investment in stock is recovered when the stock is sold.**

g. A house to be rented out

**A rental house is depreciable real property. It is subject to wear, tear, and obsolescence, and therefore, has a definite useful life.**

- h. Equipment for use in its business

**Equipment is tangible personal property. It is subject to wear, tear, and obsolescence, and therefore, has a definite useful life.**

- i. An interest in an oil well

**An interest in an oil well does not depreciate; it is an intangible asset that has a definite useful life. The cost of an oil well is recovered through depletion.**

- j. A car that will be used 60% for business and 40% for personal use

**A car is tangible personal property. It is subject to wear, tear, and obsolescence and therefore, has a definite useful life. However, to deduct depreciation, there must be a business purpose for the asset. Therefore, only the 60% business use portion is subject to depreciation. The personal use portion is not depreciable.**

22. State whether each of the following expenditures incurred during the current year should be treated as a repair expense or capitalized and depreciated using MACRS:

- a. Replacement of the carpeting in a rental apartment

**The replacement of the carpet is a maintenance cost that does not extend the useful life of the rental apartment. Therefore, the cost of the carpeting is a maintenance expense. However, if the carpeting is done as part of the purchase of the rental apartment, it is capitalized as part of the cost of readying the apartment for its intended use.**

- b. Replacement of the drill bit on a gas-powered post-hole digger

**The drill bit is tangible property. If its useful life does not extend beyond the year placed in service, its cost is considered a repair expenditure and it is deducted in the current year. If the drill bit has a useful life extending beyond the year placed in service, its cost is capitalized and depreciated.**

- c. Replacement of the water in the ponds of a catfish farm

**Generally, water is not depreciable because it does not have a definite life. However, this particular water probably has a definite life because it has a specific use. The expenditure is more like a repair cost. Therefore, it is deducted in the year incurred. However, if it can be established that the water has a useful life to the activity of greater than a year, its cost will be capitalized and depreciated.**

- d. Replacement of spark plugs in a delivery truck

**Replacing spark plugs does not increase the capacity or extend the useful life of the truck. The spark plugs merely allow the truck to perform in its intended operating condition. Therefore, the cost of the spark plugs are expensed as a repair cost.**

- e. Repainting the exterior of a personal use auto

**The repainting does not extend the useful life of the auto. Therefore, the cost is not capitalized and is a current expense similar to a repair. However, the cost is not deductible since it is a personal expense.**

23. For each of the following expenditures incurred during the current year, indicate whether it should be treated as a repair expense or capitalized and depreciated using MACRS:

- a. Replacement of the roof on an apartment building

**A roof provides benefits substantially beyond the end of the year of the expenditure by increasing the useful life of the building. Therefore, it must be capitalized and depreciated.**

- b. Replacement of the condenser in a central air conditioning unit

**Replacing a condenser does not increase capacity or extend useful life. It merely maintains the unit in its intended operating condition. Therefore, the condenser is expensed as a repair cost.**

- c. Replacement of the tires on a delivery truck

**Replacing tires does not increase the capacity or extend the useful life of the truck. The tires merely allow the truck to perform in its intended operating condition. Therefore, the cost of the tires is expensed as a repair cost.**

- d. Addition of 10 tons of gravel to a parking lot to restore its surface

**The gravel is in the nature of a repair. Restoring the surface allows the parking lot to continue to be used for its intended purpose. Therefore, the cost of the gravel would be expensed as a repair cost.**

- e. Repainting of the interior and exterior of an apartment building

**Painting is a maintenance cost that does not extend the useful life or increase capacity. Therefore, the cost of the painting is a maintenance expense. However, if the painting is done as part of the purchase of the apartment building, it is capitalized as part of the cost of readying the building for its intended use.**

24. A taxpayer purchases \$500,000-worth of property that qualifies for the Section 179 deduction during the current year. The taxpayer would like to deduct the greatest depreciation expense possible (including the Section 179 deduction) on the property. Indicate how the depreciation expense should be determined:

**To take a deduction under Sec. 179, the property must be used in a trade or business of the taxpayer. In addition, the amount of the deduction is reduced when qualifying purchases exceed \$2,000,000 (no deduction is allowed if purchases equal or exceed \$2,500,000) or when the income from all trade or businesses of the taxpayer is less than the \$500,000 election to expense amount.**

- a. An individual

**An individual is allowed to deduct up to \$500,000 per year of qualifying purchases of property used in a trade or business subject to the purchases and income limitations. Property used in an investment activity is not eligible for a deduction under Sec. 179.**

- b. A corporation

**A corporation is always deemed to be in a trade or business and can deduct the \$500,000 election to expense amount subject to the purchases and income limitations.**

- c. An S corporation

**An S corporation is not a taxable entity. However, it can elect to expense up to \$500,000 per year of qualifying purchases subject to the purchases and income limitations. The elected amount flows through to the owners of the S corporation who deduct it on their personal income tax returns. Each shareholder is subject to the overall \$500,000 deduction limitation.**

- d. A partnership

**A partnership is not a taxable entity. However, it can elect to expense up to \$500,000 per year of qualifying purchases subject to the purchases and income limitations. The elected amount flows through to the partners who deduct it on their personal income tax returns. Each partner is subject to the overall \$500,000 deduction limitation.**

25. Firefly, Inc., acquires business equipment in July 2016 for \$2,005,000.

a. What is Firefly's maximum Section 179 deduction for 2016? Explain.

**Because Firefly acquired over \$2,000,000 of qualifying Section 179 property, the annual investment limit applies. The \$500,000 annual deduction is reduced dollar for dollar by the amount of the investment in qualifying property in excess of \$2,000,000. Firefly's Section 179 deduction is reduced by \$5,000 (\$2,005,000 - \$2,000,000) and its Section 179 deduction is limited to \$495,000 (\$500,000 - \$5,000).**

b. What happens to any portion of the annual limit not deducted in 2016? Explain.

**The \$5,000 of the annual limit not deductible in 2016 is lost forever. Annual investment limit rules provide for no carry forward provisions.**

c. What is the depreciable basis of the equipment? Explain.

**The depreciable basis of the equipment is \$1,510,000 (\$2,005,000 - \$495,000). The acquisition cost of the equipment is reduced by the amount of the Section 179 election for the current year.**

26. In 2016, Terrell, Inc., purchases machinery costing \$2,018,000. Its 2016 taxable income before considering the Section 179 deduction is \$490,000.

a. What is Terrell's maximum Section 179 deduction in 2016? Explain.

**Because Terrell acquired over \$2,000,000 of qualifying Section 179 property, the annual investment limit applies. The \$500,000 annual deduction is reduced dollar for dollar by the amount of the investment in qualifying property in excess of \$2,000,000. Terrell's Section 179 deduction is reduced by \$18,000 (\$2,018,000 - \$2,000,000) and its Section 179 deduction is limited to \$482,000 (\$500,000 - \$18,000). The taxable income limit does not affect the amount of the 2016 Section 179 deduction because the \$490,000 taxable income exceeds the \$482,000 maximum election to expense.**

b. What is the depreciable basis of the equipment?

**The depreciable basis of the equipment is \$1,536,000 (\$2,018,000 - \$482,000). The acquisition cost of the equipment is reduced by the amount of the Section 179 election for the current year.**



27. In 2016, Theo purchases \$16,000 of Section 179 property for use in his delivery business. During 2016, he has \$12,000 in taxable income from his business.

- a. What is Theo's maximum Section 179 deduction in 2016? Explain

**The taxable income limitation applies to this scenario. That is, the maximum Section 179 deduction is limited to the taxpayer's taxable income calculated before the Section 179 deduction. Although Theo purchased \$16,000 of qualifying Section 179 property, he can deduct only \$12,000, the amount of the taxable income from his business. Theo can elect to expense \$16,000 and carryforward the \$4,000 excess to 2017 or expense only \$12,000 and depreciate the \$4,000 excess.**

- b. Theo's business taxable income for 2017 is \$5,000. He purchases \$1,000 of new Section 179 property in 2017. What is Theo's maximum Section 179 deduction for 2017?

**If Theo elects to expense the full \$16,000 in 2016, he can deduct a total of \$5,000 (\$1,000 + \$4,000) in 2017. The \$1,000 from 2017 is used first, then the \$4,000 carried over from 2016. If he elects to expense only the \$12,000 maximum deduction in 2016, then he can only expense the \$1,000 of 2017 purchases.**

**Instructor's Note: If he chose to expense only \$12,000 in 2016, his basis in the property is \$4,000 and he is entitled to a depreciation deduction on the \$4,000.**

28. During 2016, Belk Corporation purchases \$70,000-worth of equipment for use in its business. Belk's current taxable income before considering the Section 179 deduction is \$26,000.

- a. What is Belk's maximum Section 179 deduction in 2016? Explain.

**The taxable income limitation applies to this scenario. That is, the maximum Section 179 deduction is limited to the taxpayer's taxable income calculated before the Section 179 deduction. Although Belk purchased \$70,000 of qualifying Section 179 property, it can deduct only \$26,000, the amount of taxable income from the business. The \$44,000 (\$70,000 - \$26,000) excess may be carried forward to 2017. Note: If Belk elects to expense only \$26,000, no carryforward results. However, its basis in the property is \$44,000 instead of zero.**

- b. Belk's 2017 business taxable income---before a Section 179 deduction---is \$50,000. What is Belk's maximum Section 179 deduction in 2017? Explain.

**Assuming that Belk elected to expense \$70,000 in 2016, under the taxable income limitation, a maximum of \$44,000 can be deducted. Since Belk's carryforward of \$44,000 is less than its taxable income, the full amount of the carryforward can be deducted in 2017. If Belk only expenses \$26,000 in 2016, then there is no deduction in 2017 but its depreciable basis in the property is \$44,000 instead of zero.**

29. Brad is a shareholder and full-time employee of an S corporation. During 2016, he earns a \$50,000 salary from the S corporation and is allocated \$12,000 as his share of its net operating loss. In addition, Brad owns a limited partnership interest from which he earns \$12,000 during 2016. Kanika, Brad's wife, operates a small business as a sole proprietorship. During 2016, she spends \$65,000 on equipment for use in her business, which has a taxable income of \$17,000 before the Section 179 deduction.

a. What is Brad and Kanika's maximum Section 179 deduction for 2016?

**The maximum Section 179 deduction for 2016 is \$500,000. However, this amount is limited to Brad and Kanika's trade or business income (i.e., his salary, share of S corporation income and Kanika's business income) during the year. In this case, Brad and Kanika have \$55,000 of income from their individual business interests:**

Brad's salary	\$ 50,000
Brad's share of NOL of S corporation	(12,000)
Kanika's business income	17,000
Total trade or business income	<u>\$ 55,000</u>

**The limited partnership income is not trade or business income. Limited partnerships are always passive and are never a trade or business.**

**For 2016, married taxpayers are only allowed to expense a total of \$500,000 between them. Kanika purchased \$65,000 of qualifying property, so she may expense \$55,000 of the cost of the property, leaving a depreciable basis of \$10,000. Alternatively, she could elect to expense the maximum \$65,000 (i.e., amount of equipment acquired), although her deduction is limited to \$55,000. The \$10,000 (\$65,000 - \$55,000) excess election to expense is carried forward to 2017 for deduction as a Section 179 expense. This would leave a zero depreciable basis in the equipment.**

- b. Assume that Brad is allocated \$12,000 in Section 179 expense from the S corporation for 2017 and Kanika spends an additional \$14,000 on equipment for use in her business. Also, assume that their taxable active business income is \$35,000 for 2017. What is Brad and Kanika's maximum Section 179 deduction for 2017?

**They have \$26,000 of qualifying purchases in 2017 - the \$12,000 election to expense from the S corporation and the \$14,000 of equipment purchased. The calculation of the Section 179 deduction depends on whether Kanika elected to expense only \$55,000 of the maximum \$65,000 in 2016. If she did, there would be no carryforward and if she chooses to expense the maximum in 2017, the Section 179 deduction is \$26,000 and the basis of the equipment is \$0 (\$14,000 - \$14,000):**

<b>179 Election from S corporation</b>	<b>\$ 12,000</b>
<b>Equipment purchased</b>	<b>14,000</b>
<b>Maximum section 179 expense deduction</b>	<b><u>\$ 26,000</u></b>

**If Kanika had elected to expense the full \$65,000 in 2016, the \$10,000 carryforward is deducted first in 2017. If she chooses to expense the full amount of the equipment in 2016, the \$35,000 Section 179 deduction consists of: the \$10,000 carryforward from 2016, the \$12,000 Section 179 election from the S corporation and \$14,000 from the Section 179 election in 2017. The basis in the equipment is \$-0-.**

<b>179 Election carryforward from 2016</b>	<b>\$ 10,000</b>
<b>179 Election from S corporation</b>	<b>12,000</b>
<b>Equipment purchased</b>	<b>14,000</b>
<b>Total Section 179 elected</b>	<b><u>\$ 36,000</u></b>
<b>Maximum section 179 expense deduction</b>	<b><u>(35,000)</u></b>
<b>Section 179 carryforward to 2018</b>	<b><u>\$ 1,000</u></b>

30. Jennifer owns a 40% interest in the Thomas Partnership. She also owns and operates an architectural consulting business. During the current year, the partnership purchases \$516,000-worth of property qualifying under Section 179 and elects to expense \$500,000. Jennifer purchases \$301,200-worth of qualifying Section 179 property for use in her architectural consulting business. Write a letter to Jennifer explaining what she should do to maximize her cost recovery.

**Each partner will be allocated his/her proportionate share of the \$500,000 expense election. Each partner is then subject to the \$500,000 limit on his or her personal return. Jennifer will be allocated \$200,000 ( $\$500,000 \times 40\%$ ) of the deduction. This leaves her a maximum additional Section 179 election to expense of \$300,000. Her qualifying property purchases are \$301,200, so she can expense \$300,000 ( $\$500,000 - \$200,000$ ) of the excess Section 179 election. Her Section 179 deduction is \$500,000 ( $\$200,000 + \$300,000$ ). The depreciable basis of the purchased property becomes \$1,200 ( $\$301,200 - \$300,000$ ). The first-year depreciation, assuming the property is 7-year MACRS is \$171 ( $\$1,200 \times 14.29\%$ , from Table A10-2). Therefore, Jennifer's total cost recovery would be \$500,171 ( $\$200,000 + \$300,000 + \$171$ ).**

Allocation from the partnership	\$200,000
Section 179 deduction for property purchased	<u>300,000</u>
Maximum Section 179 deduction	\$500,000
Depreciable basis ( $\$301,200 - \$300,000$ )	\$ 1,200
1st year depreciation (Table A10-2)	<u><math>\times 14.29\%</math></u>
Total current year cost recovery	<u><u>171</u></u>
	<u><u>\$500,171</u></u>

31. In each of the following situations, determine the depreciable basis of the asset:

- a. Rudy inherits his father's pickup truck. The truck is immediately placed in service in Rudy's delivery business. The fair market value of the truck at the date of Rudy's father's death is \$8,000, and the value on the alternate valuation date is \$8,500. The executor of the estate does not make any special elections. The truck originally cost Rudy's father \$15,000.

**Rudy's basis is equal to the estate tax valuation. In this case, the truck is valued at the date of death and Rudy's basis is the \$8,000 fair market value at that date. Note: The pickup is eligible for the Section 179 election. If the election is made the depreciable basis in the asset is zero.**

- b. Maline purchases an office building to use as the main office of her mail order business. She pays the seller \$100,000 in cash. In addition, she gives the seller her personal note for \$250,000, plus 10 acres of real estate. At the date of the transaction, the real estate, which cost \$20,000, is worth \$50,000. Property tax records show the land is assessed at \$10,000 and the building is assessed at \$40,000.

**The total purchase price of the land and the building is \$400,000 (\$100,000 cash + \$250,000 debt + \$50,000 fair market value of the real estate). Maline must allocate the purchase price between the land and the building. Based on the property tax assessed values, \$80,000 [ $\$400,000 \times (\$10,000 \div \$50,000)$ ] is allocated to the land and the remaining \$320,000 [ $\$400,000 \times (\$40,000 \div \$50,000)$ ] is the depreciable basis of the building.**

- c. Steve owns a computer that he bought for \$3,000. The computer was used for personal family activities. When he starts his business, Steve takes the computer to his new office. The computer is worth \$500 when he begins using it in his business.

**The basis of personal property converted to business use is subject to the split-basis rule when the fair market value of the property is less than the property's adjusted basis at the date of the conversion. The basis for computing loss and depreciation is the fair market value and the basis for computing gain is the adjusted basis of the property. In this case, Steve's depreciable basis is \$500. Note: The computer is eligible for the Section 179 election. If the election to expense is made, the depreciable basis in the asset is zero.**

- d. Martha's aunt Mabel gives her a used table, which had been stored in Mabel's garage, to use in the conference room in Martha's office. Mabel paid \$1,200 for the table several years ago, and it is worth only \$700 at the date of the gift. Mabel does not pay any gift tax on the transfer.

**The split-basis rule for gifts applies because the fair market value is less than basis at the date of the gift. Martha's basis for depreciation is the fair market value, \$700. Note: The table is eligible for the Section 179 election. If the election to expense is made, the depreciable basis in the asset is zero.**

32. In each of the following situations, determine the depreciable basis of each asset.

- a. Melissa purchases furniture and fixtures from the estate of the owner of a business for \$45,000. She plans to use these assets in her business.

**The entire \$45,000 of the furniture and fixtures cost is depreciable. Note: The furniture and fixtures are eligible for the Section 179 election. If the election to expense is made, the depreciable basis in the asset is zero (\$45,000 - \$45,000).**

- b. Quang purchased a computer from his employer for \$4,000. He plans to use it in his consulting practice, which he conducts in the evenings and on weekends. The fair market value of the computer is \$7,000.

**The basis in the computer is \$7,000. The bargain purchase rules apply. The computer's basis is the amount paid, \$4,000, plus the \$3,000 (\$7,000 FMV - \$4,000 selling price) Quang recognizes from the bargain purchase. Note: The computer is eligible for the Section 179 election. If the election to expense is made, the depreciable basis in the asset is zero.**

- c. Jenny begins using her personal computer equipment in her business. She purchased the equipment for \$19,000 in 2014 and it is currently worth \$13,000.

**The depreciable basis is \$13,000. The split-basis rule for property converted from personal to business use are applicable because the fair market value is less than the adjusted basis on the conversion date (\$13,000 < \$19,000). The fair market value becomes the basis of the business use asset for depreciation purposes. Note: The equipment is eligible for the Section 179 election. If the election to expense is made, the depreciable basis in the asset is zero.**

- d. Fletcher inherits a collectible car from his grandfather's estate. The grandfather's basis in the car was \$5,000. The executor of the estate does not make any special elections and values the car at its appraised fair market value of \$25,000. Fletcher plans to use the car in his business.

**The depreciable basis of the car becomes the fair market value of \$25,000. The property is inherited, and the rules for inherited property are used. Note: The automobile is eligible for the Section 179 election. If the election to expense is made, the maximum amount, assuming 100% business use is subject to the limitation on passenger automobiles.**

33. Determine the class life, MACRS recovery period, and ADS recovery period of each of the following assets:

**MACRS Class Lives are determined using the Table of MACRS Classes found in Rev. Proc. 87-56. This table is partially reproduced in Table A10-1 of the Appendix to Chapter 10. The MACRS recovery period is determined by finding the proper class and description of the asset, and using the recovery period in the column labeled General Depreciation System. The ADS recovery period is found using the column labeled Alternative Depreciation System.**

- a. Barge

**A barge is in asset class 00.28, has a class life of 18 years, MACRS recovery period of 10 years, and ADS recovery period of 18 years.**

- b. Computer

**A computer is in asset class 00.12, has a class life of 6 years, MACRS recovery period of 5 years, and ADS recovery period of 5 years.**

- c. Automobile

**An automobile is in asset class 00.22, has a class life of 3 years, MACRS recovery period of 5 years, and ADS recovery period of 5 years.**

- d. Breeding sheep

**Breeding sheep are in asset class 01.24, have a class life of 5 years, and a MACRS and ADS recovery period of 5 years.**

- e. Breeding horses

**Breeding horses that are less than 12 years old when placed in service are in asset class 01.221, have a class life of 10 years, MACRS recovery period of 7 years, and ADS recovery period of 10 years. Breeding horses that are more than 12 years old when placed in service are in assets class 01.222, have a class life of 10 years, MACRS recovery period of 3 years, and ADS recovery period of 10 years.**

- f. Barn

**A barn is in asset class 01.4, has a class life of 15 years, MACRS recovery period of 7 years, and ADS recovery period of 15 years.**

**Instructor's Note: The barn could be in asset class 01.3, have a class life of 25 years, a MACRS recovery period of 20 years, and ADS recovery period of 25 years. Further complicating the issue is that Section 48(p) has been repealed.**

g. Office furniture

**Office furniture is in asset class 00.11, has a class life of 10 years, MACRS recovery period of 7 years, and ADS recovery period of 10 years.**

h. Land improvements

**Land improvements are in asset class 00.3, have a class life of 20 years, MACRS recovery period of 15 years, and ADS recovery period of 20 years.**



34. Determine the class life, MACRS recovery period, and ADS recovery period of each of the following assets acquired for a sports bar:

- a. Pool table

**A pool table is in asset class 79.0, has a class life of 10 years, MACRS recovery period of 7 years, and ADS recovery period of 10 years.**

- b. Safe

**A safe is in asset class 00.11, has a class life of 10 years, MACRS recovery period of 7 years, and ADS recovery period of 10 years.**

- c. Photocopying machines

**Photocopiers are in asset class 00.13, have a class life of 6 years, MACRS recovery period of 5 years, and ADS recovery period of 6 years.**

- d. Pickup truck

**Pickup trucks are in asset class 00.241, have a class life of 4 years, MACRS recovery period of 5 years, and ADS recovery period of 5 years.**

- e. Electronic video games

**Video games do not have a specified asset class. Therefore, the category for personal property with no class life is used. The MACRS recovery period is 7 years, and the ADS recovery period is 12 years.**

- f. Brewing tanks for the bar's microbrewery

**Brewing tanks do not have a specified asset class. Therefore, the category for personal property with no class life is used. The MACRS recovery period is 7 years, and the ADS recovery period is 12 years.**

- g. Four-year-old racehorse named GofortheBrew purchased by the bar owners and raced locally

**Four-year-old racehorses are in asset class 01.223, have no class life, MACRS recovery period of 3 years, and ADS recovery period of 12 years.**

- h. Point-of-sale computerized cash registers

**Point-of-sale registers are not specifically listed in asset class 00.12. The best choice is probably asset class 00.13 Data Handling Equipment with a class life of 6 years, MACRS recovery period of 5 years, and ADS recovery period of 6 years.**

35. For each asset in problem 34, determine the correct IRS percentage table, recovery period, and applicable convention.

**All of the assets are personal property. They are not real estate. Therefore, the most likely table to use is A10-2 (MACRS Depreciation for Property Other Than Real Estate) for all of these assets. The applicable convention is mid-year. The assumption is that 40% or less of these assets are placed into service during the last quarter of the year. If more than 40% of these assets are placed into service in the fourth quarter, then Tables A10-3, A10-4, A10-5, or A10-6 are used depending on the actual quarter that a specific asset is placed into service, and the applicable convention becomes mid-quarter.**

- a. Pool table

**For a pool table use Table A10-2 (MACRS Depreciation for Property other than Real Estate). The recovery period is 7 years, and the applicable convention is mid-year.**

- b. Safe

**For a safe use Table A10-2. The MACRS recovery period is 7 years, and the applicable convention is mid-year.**

- c. Photocopying machines

**For photocopiers use Table A10-2. The MACRS recovery period is 5 years, and the applicable convention is mid-year.**

- d. Pickup truck

**For pickup trucks use Table A10-2. The MACRS recovery period is 5 years, and the applicable convention is mid-year.**

- e. Electronic video games

**For video games use Table A10-2. The MACRS recovery period is 7 years, and the applicable convention is mid-year.**

- f. Brewing tanks for the bar's microbrewery

**For brewing tanks use Table A10-2. The MACRS recovery period is 7 years, and the applicable convention is mid-year.**

- g. Four-year-old racehorse named GofortheBrew purchased by the bar owners and raced locally

**Use Table A10-2 for Four-year-old racehorses. The MACRS recovery period is 3 years, and applicable convention is mid-year.**

- h. Point-of-sale computerized cash registers

**For point-of-sale registers use Table A10-2. The MACRS recovery period is 5 years, and the applicable convention is mid-year.**

36. Determine the correct IRS percentage table, recovery period, and applicable convention for each of the following assets:

**The following answers assume that for personal property 40% or less of the total assets are placed into service during the last quarter of the year. Therefore, Table A10-2 is appropriate for these items of personal property, and the applicable convention is mid-year. If more than 40% of these assets are placed into service in the fourth quarter, then Tables A10-3, A10-4, A10-5, or A10-6 are used depending on the actual quarter that a specific asset is placed into service, and the applicable convention becomes mid-quarter.**

- a. Helicopter

**Use Table A10-2, MACRS recovery period 5 years (see Table A10-1, Asset Class 00.21), with an applicable convention of mid-year.**

- b. 68-unit apartment building

**Use Table A10-7 (MACRS Depreciation for Residential Rental Property) with a recovery period of 27.5 years. The applicable convention is mid-month.**

- c. The new Wings Field baseball stadium in Buffalo

**Use Table A10-9 (MACRS Depreciation for Nonresidential Real Property Placed in Service After May 12, 1994) with a recovery period of 39 years. The applicable convention is mid-month.**

- d. Automobile

**Use Table A10-2, MACRS recovery period 5 years (see Table A10-1, Asset Class 00.22), with an applicable convention of mid-year.**

- e. Commercial office building

**Use Table A10-9 (MACRS Depreciation for Nonresidential Real Property Placed in Service After May 12, 1994) with a recovery period of 39 years. The applicable convention is mid-month.**

- f. Farm equipment storage building

**These assets are in Asset Class 01.3, from Table A10-1, with a MACRS recovery period of 20 years. The appropriate IRS table for this class of assets is Table A10-2. The applicable convention is mid-year. (A point to note about this class of assets is that they are not considered realty for MACRS purposes.)**

**Instructor's Note: The property could also be classified in asset class 01.4, with a MACRS recovery period of 7 years. Additional information cannot be obtained from Section 48(p) because it has been repealed.**

37. The United Express Company begins business in August 2016 by purchasing the assets listed in the table below. Calculate the maximum MACRS depreciation on the assets.

<u>Asset</u>	<u>Cost</u>
Trucks	\$ 98,000
Tractor units	55,000
Office equipment	466,000

To claim the maximum MACRS depreciation, the company should elect to expense the maximum \$500,000 allowed under Section 179 for 2016. In addition, the company should elect to expense the assets with the longest useful life. United's cost recovery deduction is \$531,133.

**Office Equipment (7-year life):**

Election to expense		\$ 466,000
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**Trucks (5-year life):**

Election to expense (500,000-466,000)		\$ 34,000
Depreciable basis (98,000-34,000)	\$64,000	
First-year depreciation (Table A10-2)	<u>x 20%</u>	
Cost-recovery on trucks		12,800

**Tractor Units ( 3-year life):**

Depreciable basis	\$55,000	
First-year depreciation (Table A10-2)	<u>x 33.33%</u>	
Cost-recovery on tractor units		18,333

<b>Total 2016 cost recovery</b>		<b><u>\$ 531,133</u></b>
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38. Assume that in problem 37, the United Express Company sells a truck that cost \$60,000 in 2016 for \$15,000 in June 2019. Assume that none of the truck was expensed in 2016. Compute the adjusted basis of the truck and the gain or loss from the sale.

The adjusted basis of the truck is \$13,824, calculated by computing depreciation for each year using Table A10-2. Under the mid-year convention, only half a year's depreciation is allowed in the year of sale.

Original basis		\$ 60,000
2016: (\$60,000 x 20%)	\$12,000	
2017: (\$60,000 x 32%)	19,200	
2018: (\$60,000 x 19.2%)	11,520	
2019: [(\$60,000 x 11.52%) ÷ 2]	<u>3,456</u>	
Total depreciation		(46,176)
Adjusted basis		<b><u>\$ 13,824</u></b>

The adjusted basis of \$13,824 is subtracted from the \$15,000 sales price resulting in a gain of \$1,176.

Sales price	\$ 15,000
Less: adjusted basis	(13,824)
Gain on sale	<b><u>\$ 1,176</u></b>

39. The Browser Company purchases a computer in August 2016 for \$12,000. Browser does not elect to expense the asset but wants to claim the maximum depreciation. In May 2019, the company sells the computer. Calculate the adjusted basis of the computer at the date of sale.

**The adjusted basis of the computer is \$2,765, calculated by computing depreciation for each year using Table A10-2 (useful life of 5 years). Under the mid-year convention, only half a year's depreciation is allowed in the year of sale.**

<b>Original Basis</b>		<b>\$ 12,000</b>
2016: (\$12,000 x 20.0%)	2,400	
2017: (\$12,000 x 32.0%)	3,840	
2018: (\$12,000 x 19.2%)	2,304	
2019: [(\$12,000 x 11.52%) x 1/2]	<u>691</u>	
<b>Total Depreciation</b>		<b>(9,235)</b>
<b>Adjusted Basis</b>		<b><u>\$ 2,765</u></b>

40. The Browser Company purchases a computer in December 2016 for \$12,000. This is the only depreciable personal property acquired during the year. Browser does not elect to expense the asset but wants to claim the maximum depreciation. In May 2019, the company sells the computer. Calculate the adjusted basis of the computer at the date of sale.

**Since more than 40% of the depreciable basis of personal property is placed in service during the last three months of the tax year, Browser Corporation must use the mid-quarter convention. The adjusted basis of the computer is \$3,488, calculated by computing depreciation for each year using Table A10-6 (useful life of 5 years). Because it was sold in the second quarter and Browser is using the mid-quarter-convention, only 4.5 months (i.e., 37.5%) of a year's depreciation is allowed in the year of sale.**

<b>Original Basis</b>		<b>\$ 12,000</b>
2016: (\$12,000 x 5%)	\$ 600	
2017: (\$12,000 x 38%)	4,560	
2018: (\$12,000 x 22.8%)	2,736	
2019: (\$12,000 x 13.68% x 37.5%)	<u>616</u>	
<b>Total Depreciation</b>		<b>(8,512)</b>
<b>Adjusted Basis</b>		<b><u>\$ 3,488</u></b>

41. Larry purchases machinery for his business (7-year MACRS property) on April 1, at a cost of \$547,000. On June 1, he spends \$84,000 for equipment (5-year MACRS property).

- a. What is the maximum deduction allowable?

To obtain the maximum deduction, Larry should elect to expense \$500,000 of the cost of the purchases and use the regular MACRS depreciation system. To maximize the election to expense deduction, the \$500,000 should be allocated to the property with the longest useful life, in this case the machinery. This will result in a 2016 cost-recovery deduction of \$523,516:

**Cost Recovery on Machinery**

Election to expense		\$500,000
Depreciable basis (\$547,000 - \$500,000)	\$ 47,000	
1st year depreciation (Table A10-2)	x 14.29%	6,716
Cost-recovery on machinery		<u>\$506,716</u>

**Cost Recovery on Equipment**

Depreciable basis	\$ 84,000	
1st year depreciation (Table A10-2)	x 20%	16,800
Total 2016 cost recovery		<u>\$523,516</u>

- b. What is the minimum deduction allowable?

To minimize the deduction allowable, Larry should not elect to expense any of the cost and elect to use straight-line depreciation over the ADS life. Machinery has no assigned class life, so the ADS recovery period will be 12 years, the ADS recovery period for property without a class life. The first year ADS straight-line for 12-year property is 4.17%  $[(1 \div 12) \times 50\% \text{ mid-year convention}]$ . For equipment, the ADS recovery period is 10 years, and the first year ADS straight-line for 10-year property is 5%  $[(1 \div 10) \times 50\% \text{ mid-year convention}]$ . Therefore, the minimum allowable deduction would be \$27,010:

Machinery depreciable basis	(\$547,000 x 4.17%)	\$22,810
Equipment depreciable basis	(\$84,000 x 5.00%)	4,200
Minimum depreciation deduction		<u>\$27,010</u>

42. Kris starts a new business in 2016. She purchases 7-year MACRS property costing \$12,000. Her business income before any cost-recovery deductions is \$8,000.

- a. What is the maximum cost-recovery deduction allowable for 2016?

**The maximum cost-recovery deduction is obtained by electing to expense the maximum amount under Section 179 and using the regular MACRS method to compute depreciation. In this case, if the Section 179 election maximum amount is elected, only \$8,000 of the \$12,000 election is deductible in the current period due to the income limitation. The remaining \$4,000 of the election is carried forward and used after any Section 179 election in the carry forward period. However, the depreciable basis in the property must be reduced by the full amount elected, even if it is not deducted in full in the election period.**

- b. How does your answer change if Kris informs you that she plans to make significant investments in personal property over the next 3 years?

**Because Kris anticipates future purchases of qualifying property that may be able to use the full Section 179 expense election amount, it would be better to only elect to expense the \$8,000 taxable income limit in 2016. The \$4,000 remaining basis is depreciated over the 7-year MACRS recovery period. This increases the current deduction with no reduction in future amounts. Kris's maximum 2016 depreciation deduction is \$8,572:**

Election to expense		\$ 8,000
Depreciable basis (\$12,000 - \$8,000)	\$ 4,000	
1st year depreciation (Table A10-2)	<u>x 14.29%</u>	<u>572</u>
Total 2016 depreciation deduction		<u>\$ 8,572</u>

**If Kris elected to expense the full \$12,000 allowed, the maximum 2016 deduction is limited to the \$8,000 election to expense:**

Election to expense		\$8,000
Depreciable basis (\$12,000 - \$12,000)	\$ -0-	
1st year depreciation (Table A10-2 )	<u>x 14.29%</u>	<u>-0-</u>
Total 2016 depreciation deduction		<u>\$8,000</u>

**Section 179 carryforward to 2017 = \$4,000**

43. Dikembe purchases 1,000 breeding hogs for \$1,084,000 in April 2016.

a. What is his maximum 2016 cost-recovery deduction for the hogs?

To maximize the current year's cost recovery deductions for personal property, the general strategy is to elect the Section 179 expense deduction, and then use regular MACRS to depreciate the balance. The election to expense is taken first, reducing the basis to \$584,000 (\$1,084,000 – \$500,000). The hogs are 3-year MACRS recovery property (see Table A10-1, Asset Class 01.23). Using Table A10-2, the first-year depreciation for the hogs is \$194,647 (\$584,000 x 33.33%). This results in total first-year cost recovery of \$694,647 (\$500,000 + \$194,647).

Election to expense	\$ 500,000
Depreciable basis of hogs	
(\$1,084,000 - 500,000 = 584,000 x 33.33%)	<u>194,647</u>
Total cost recovery deduction	<u>\$694,647</u>

b. Dikembe's farming operation incurs a net loss this year and probably will next year before taking the cost recovery into consideration. What should Dikembe do in regard to his cost-recovery deductions?

Because the election to expense is limited to the amount of taxable income in a given year, Dikembe cannot benefit from the election either this year or next year. However, regular depreciation deductions can create a net operating loss. Therefore, Dikembe has two options.

Dikembe can choose a depreciation method that permits a larger deduction after next year. To accomplish this, he should use the ADS straight-line method. The ADS recovery period is 3 years for breeding hogs. Therefore, Dikembe's first-year depreciation is \$180,667 [\$1,084,000 x (100% ÷ 3) x 50% for the mid-year convention]. This amount adds to the net operating loss and can be carried back as per normal net operating loss rules. For the 2nd and 3rd years, Dikembe deducts \$361,333 [(\$1,084,000 x (100% ÷ 3))]. For year 4, Dikembe deducts the remaining undepreciated basis of \$180,667.

Year 1 depreciation	\$180,667
Year 2 depreciation	361,333
Year 3 depreciation	361,333
Year 4 depreciation	180,667
Total cost recovery deduction	<u>\$1,084,000</u>

**Note:** Dikembe cannot ignore depreciation in the year the hogs are placed in service or the following year. Depreciation must be taken (i.e., allowed or allowable).



Dikembe's second option is only viable if he has reported net income in prior years. If this is the case, he should maximize his depreciation deductions by using regular MACRS. This will increase the amount of his net operating loss which he can carry back to obtain a refund of previously paid taxes. Regular MACRS for 3-year property results in the following deductions.

Year 1 depreciation	$(\$1,084,000 \times 33.33\%)$	\$361,297
Year 2 depreciation	$(\$1,084,000 \times 44.45\%)$	481,838
Year 3 depreciation	$(\$1,084,000 \times 14.81\%)$	160,540
Year 4 depreciation	$(\$1,084,000 \times 7.41\%)$	80,325
Total cost recovery deduction		<u>\$1,084,000</u>

44. Rograin Corporation purchases turning lathes costing \$1,033,000 and buses costing \$975,000 in June of the current year. The lathes are 7-year MACRS property, and the buses are 5-year MACRS property.

- a. What is Rograin's maximum Section 179 deduction?

**The maximum Section 179 expense deduction is \$500,000 for 2016. However, the deduction is reduced dollar for dollar when purchases exceed \$2,000,000. In this case, Rograin has purchased \$2,008,000 (\$1,033,000 + \$975,000) of qualifying property. Therefore, the maximum deduction is reduced by \$8,000 (\$2,008,000 - \$2,000,000) to \$492,000 (\$500,000 - \$8,000).**

- b. Assuming that Rograin deducts the maximum Section 179 expense, what are the depreciable basis of the lathes and the buses?

**The basis of assets expensed under Section 179 are reduced to prevent capital recovery in excess of cost. Rograin must determine which of the two properties to expense. To get the maximum overall depreciation deduction, the Section 179 expense deduction should be allocated to the property with the longest recovery period. This results in a depreciable basis for the lathes of \$541,000 (\$1,033,000 - \$492,000) and \$975,000 for the buses.**

- c. If Rograin wants to maximize its cost recovery this year, how much first-year depreciation may it deduct in addition to the Section 179 deduction?

**The basis of the lathes and the buses are depreciated using Table A10-2. The lathes have a recovery period of 7 years and the buses have a recovery period of 5 years. The maximum total first-year depreciation is \$764,309.**

Election to expense (from part a)	\$492,000
Lathes – First-year depreciation (\$541,000 x 14.29%)	77,309
Buses – First-year depreciation (\$975,000 x 20%)	195,000
Total cost recovery deduction	<u>\$764,309</u>

45. Baker, Inc., purchases office furniture (7-year MACRS property) costing \$511,000 and a computer system (5-year MACRS property) costing \$511,000 in 2016. What is the maximum cost-recovery deduction in 2016? (Hint: Maximize the Section 179 election effect.)

To maximize the cost-recovery deduction, Baker should elect to expense \$500,000 of the cost of the purchases and use the regular MACRS depreciation system. To maximize the election to expense deduction, the \$500,000 should be allocated to the property with the longest useful life, in this case the office furniture. This will result in a 2016 cost-recovery deduction of \$603,772:

**Cost-Recovery on Office Furniture:**

Election to expense		\$500,000
Depreciable basis	\$ 11,000	
1st year depreciation (Table A10-2)	x 14.29%	1,572
Cost-recovery on office furniture		<u>\$501,572</u>

**Cost-Recovery on Computer System:**

Depreciable Basis	\$511,000	
1st year depreciation (Table A10-2)	x 20%	102,200
Total 2016 Cost-recovery		<u>\$603,772</u>

NOTE: If Baker elected to expense \$500,000 of the computer system, the cost-recovery deduction would be \$575,222:

**Cost-Recovery on Office Furniture:**

Depreciable basis	\$ 511,000	
1st year depreciation (Table A10-2)	x 14.29%	\$73,022

**Cost-Recovery on Computer System:**

Election to expense		500,000
Depreciable basis	\$ 11,000	
1st year depreciation (Table A10-2)	x 20%	2,200
Total 2016 cost-recovery		<u>\$575,222</u>

46. Chen Corporation purchases the following business assets during the current year:

<u>Asset</u>	<u>Date Purchased</u>	<u>Cost</u>	<u>Recovery-period</u>
Office furniture	1/15/16	\$480,000	7
Computer	4/1/16	\$ 60,000	5
Boat	7/21/16	\$503,000	10

What is the maximum current year cost-recovery deduction on the assets purchased? (Hint: Maximize the Section 179 election effect.)

**To maximize the cost-recovery deduction, Chen should elect to expense \$500,000 of the cost of the purchases and use the regular MACRS depreciation system. To maximize the election to expense deduction, the \$500,000 should be allocated to the property with the longest useful life, in this case the boat. This will result in a current year cost-recovery deduction of \$580,892:**

**Cost-Recovery on Office Furniture:**

Depreciable basis	\$480,000	
1st year depreciation (Table A10-2)	<u>x 14.29%</u>	\$ 68,592

**Cost-Recovery on Computer:**

Depreciable basis	\$ 60,000	
1st year depreciation (Table A10-2)	<u>x 20%</u>	12,000

**Cost-Recovery on Tugboat:**

Election to expense		500,000
Depreciable basis (\$503,000 - \$500,000)	\$ 3,000	
1st year depreciation (Table A10-2)	<u>x 10%</u>	300
Total current year cost-recovery		<u>\$ 580,892</u>

47. Harold purchases the following business assets on the dates indicated:

Asset	Date Purchased	Cost	Recovery Period
Photocopy equipment	2/14/16	\$ 50,000	5
Dump truck	7/16/16	\$300,000	5
Bus	12/24/16	\$501,000	5

- a. What is Harold's 2016 cost-recovery deduction if he elects not to claim bonus depreciation and does not elect to expense any of the assets under Section 179?

**Because more than 40% of the purchases of tangible personal property took place in the 4th quarter ( $\$501,000 \div \$851,000 = 59\%$ ), Harold must depreciate all personal property purchased in 2016 using the mid-quarter convention. Tables A10-3 through A10-6 provide the depreciation schedules by quarter of acquisition. Harold's 2016 depreciation deduction is \$87,550:**

Asset	Depreciable Basis	Depreciation Percentage	Depreciation Deduction
Photocopy Equipment	\$ 50,000	35% (Table A10-3)	\$17,500
Dump Truck	\$300,000	15% (Table A10-5)	\$45,000
Bus	\$501,000	5% (Table A10-6)	\$25,050
<b>2016 Cost-Recovery deduction using mid-quarter convention</b>			<b><u>\$87,550</u></b>

**NOTE:** Without the mid-quarter convention, the deduction would have been \$170,200 ( $\$851,000 \times 20\%$ ) under the regular MACRS method.

- b. What could Harold do to maximize his 2016 deduction?

**Because the calculation of purchases for purposes of the 40% rule uses the depreciable basis placed in service each quarter, Harold can avoid the mid-quarter convention by electing to expense \$500,000 of the bus. This reduces the depreciable basis of the bus to \$1,000 ( $\$501,000 - \$500,000$ ) and the total depreciable basis placed in service during the year to \$351,000. With the election to expense allocated to the bus, Harold will only have placed 0.28% ( $\$1,000 \div \$351,000$ ) of the property in service during the 4th quarter and will be able to use the regular MACRS method. Harold claims \$70,200 ( $\$351,000 \times 20\%$ ) in regular MACRS cost-recovery. His total deduction is \$570,200 of depreciation in 2016 (\$500,000 election to expense + \$70,200 of regular MACRS cost-recovery).**

48. The Gladys Corporation buys office equipment costing \$574,000 on May 12, 2016. In 2018, new and improved models of the equipment make it obsolete, and Gladys sells the old equipment for \$34,000 on December 27, 2019.
- a. What is Gladys Corporation's gain or loss on the sale assuming that Gladys takes the maximum cost-recovery deduction allowable on the equipment?

**The office equipment is considered 7-year property. To maximize the cost-recovery deductions, Gladys should elect to expense \$500,000 of the cost of the equipment, and use the regular MACRS method on the \$74,000 (\$574,000 – \$500,000) depreciable basis. Gladys' cost-recovery deduction on the equipment for 2016 through 2019 is \$546,262:**

Year	Depreciable Basis	Depreciation Percentage	Depreciation Deduction
2016	Election to expense		\$ 500,000
2016	\$ 74,000	14.290%	10,575
2017	\$ 74,000	24.490%	18,123
2018	\$ 74,000	17.490%	12,943
2019	\$ 74,000	6.245%*	4,621
Total depreciation			<u>\$ 546,262</u>

\* Personal property under MACRS is subject to the mid-year convention. This allows a half-year of depreciation in the year of disposition. For 2019, a full year of depreciation would be 12.49%. Therefore, 6.245% is one-half of the 2019 depreciation percentage.

Gladys' adjusted basis at the date of sale is \$27,738 (\$574,000 - \$546,262). This results in a gain on the sale of \$6,262 (\$34,000 - \$27,738).

- b. What is Gladys Corporation's gain or loss on the equipment assuming that Gladys takes the minimum cost-recovery deduction allowable on the equipment?

To minimize the cost-recovery deductions, Gladys will not elect to expense any of the equipment under Section 179 and use the straight-line method over the Alternate Depreciation System life. Using Table A10-1, office equipment would have an ADS life of 10-years. This results in total depreciation deductions for 2016 through 2019 of \$172,200:

Year	Depreciable Basis	Depreciation* Percentage	Depreciation Deduction
2016	\$ 574,000	5.00%	\$ 28,700
2017	\$ 574,000	10.00%	57,900
2018	\$ 574,000	10.00%	57,900
2019	\$ 574,000	5.00%**	28,700
Total Depreciation			<u>\$172,200</u>

\* Depreciation percentages are from Table A10-11.

\*\* Personal property under MACRS is subject to the mid-year convention. This allows a half-year of depreciation in the year of disposition. For 2019, a full year of depreciation would be 10.00% (5.00% is a half-year of depreciation in 2019).

Gladys' adjusted basis at the date of sale is \$401,800 (\$574,000 - \$172,200). This results in a loss on the sale of \$367,800 (\$34,000 - \$401,800).

**NOTE:** The depreciation calculations from this problem will be needed for problem 63, Chapter 11.

49. In June 2016, Copper Kettle, Inc., purchases duplicating equipment for \$541,000.
- a. Compare cost recovery deductions using maximum, minimum, and intermediate methods over the recovery period of the equipment.

**Maximizing the cost recovery includes using the Section 179 election (\$500,000) and using the regular MACRS method on the remaining depreciable basis of \$41,000 (\$541,000 - \$500,000) using Table A10-2. Duplicating equipment has a MACRS recovery period of 5 years.**

Depreciable Year	Depreciation Basis	Depreciation Percentage	Depreciation Deduction
2016	Election to Expense		\$500,000
2016	\$41,000	20.00%	8,200
2017	\$41,000	32.00%	13,120
2018	\$41,000	19.20%	7,872
2019	\$41,000	11.52%	4,723
2020	\$41,000	11.52%	4,723
2021	\$41,000	5.76%	3,362
Total			<u>\$ 541,000</u>

**Minimizing the cost recovery deduction suggests using the ADS straight-line method. The ADS recovery period is 6 years. Therefore, the annual deduction rate is 16.67% (1/6).**

Depreciable Year	Depreciation Basis	Depreciation Percentage	Depreciation Deduction
2016	\$541,000	8.33%	\$ 45,065
2017	\$541,000	16.67%	90,185
2018	\$541,000	16.67%	90,185
2019	\$541,000	16.67%	90,185
2020	\$541,000	16.67%	90,185
2021	\$541,000	16.66%	90,130
2022	\$541,000	8.33%	45,065
Total			<u>\$541,000</u>



An intermediate cost recovery method is to use the MACRS recovery period (5 years) with the straight-line method (Table A10-11). The Section 179 election to expense is not made and an election not to claim additional first-year depreciation is made.

Depreciable Year	Depreciation Basis	Depreciation Percentage	Depreciation Deduction
2016	\$541,000	10%	\$ 54,100
2017	\$541,000	20%	108,200
2018	\$541,000	20%	108,200
2019	\$541,000	20%	108,200
2020	\$541,000	20%	108,200
2021	\$541,000	10%	54,100
Total			<u>\$ 541,000</u>

- b. Explain why Copper Kettle, Inc., would elect to use each of these methods.

Maximizing the cost recovery provides the largest deductions in the early years to offset income. The larger deductions are more valuable if taken in the early years due to the time value of money. A minimum cost recovery method is desirable if an enterprise is experiencing losses or relatively low income and does not have the income to offset the deductions for cost recovery. While the intermediate method provides a slightly faster cost recovery than when minimizing because the straight-line is 1 year faster than the ADS recovery period.

50. In July 2016, Surecut Sawmills buys office furniture for \$570,000.

- a. Compare cost-recovery deductions using maximum, minimum, and intermediate methods over the recovery period of the equipment.

**Maximizing the cost recovery includes using the Section 179 election (\$500,000) and using the regular MACRS method on the depreciable basis of \$70,000 (\$570,000 - \$500,000). Office furniture has a MACRS recovery period of 7 years (Table A10-2).**

Year	Depreciable Basis	Depreciation Percentage	Depreciation Deduction
2016	Election to expense		\$500,000
2016	\$70,000	14.29%	10,003
2017	\$70,000	24.49%	17,143
2018	\$70,000	17.49%	12,243
2019	\$70,000	12.49%	8,743
2020	\$70,000	8.93%	6,251
2021	\$70,000	8.92%	6,244
2022	\$70,000	8.93%	6,251
2023	\$70,000	4.46%	3,122
			<u>\$ 570,000</u>

**Minimizing the cost recovery deduction suggests using the ADS straight-line method and electing not to claim additional first-year depreciation. The ADS recovery period is 10 years. Therefore, the annual deduction rate is 10% (1/10).**

Year	Depreciable Basis	Depreciation Percentage	Depreciation Deduction
2016	\$570,000	5.0%	\$ 28,500
2017	\$570,000	10.0%	57,000
2018	\$570,000	10.0%	57,000
2019	\$570,000	10.0%	57,000
2020	\$570,000	10.0%	57,000
2021	\$570,000	10.0%	57,000
2022	\$570,000	10.0%	57,000
2023	\$570,000	10.0%	57,000
2024	\$570,000	10.0%	57,000
2025	\$570,000	10.0%	57,000
2026	\$570,000	5.0%	28,500
			<u>\$570,000</u>

An intermediate cost recovery method is to use the MACRS recovery period with the straight line method and not electing Section 179.

Year	Depreciable Basis	Depreciation Percentage	Depreciation Deduction
2016	\$570,000	7.14%	\$ 40,698
2017	\$570,000	14.29%	81,453
2018	\$570,000	14.29%	81,453
2019	\$570,000	14.29%	81,453
2020	\$570,000	14.29%	81,453
2021	\$570,000	14.29%	81,453
2022	\$570,000	14.29%	81,453
2023	\$570,000	7.14%	40,584*
			<u>\$570,000</u>

\*Rounding

- b. Explain why Surecut would elect to use each of these methods.

Maximizing the cost recovery provides the largest deductions in the early years to offset income. The larger deductions are more valuable if taken in the early years due to the time value of money. A minimum cost recovery method is desirable if an enterprise is experiencing losses or relatively low income and does not have the income to offset the deductions for cost recovery. An intermediate method is desirable simply if a current year large deduction is not needed due to losses or relatively low income. However, this method will not extend the benefits of depreciation as much as the ADS approach.

51. Stan purchases machinery costing \$100,000 for use in his business in 2016. The machinery is 7-year MACRS property and has an ADS life of 12 years. Prepare a depreciation schedule using the regular MACRS method and ADS depreciation assuming that Stan does not make a Section 179 election.

**The machinery is tangible personal property with a MACRS class life of 7 years. For ADS depreciation, Stan will depreciate the assets using the straight-line method over 7-years.**

Year	Depreciation	
	MACRS	ADS
2016	(14.29% x \$100,000) \$ 14,290	( 7.15% x \$100,000) \$ 7,150
2017	(24.49% x \$100,000) 24,490	(14.29% x \$100,000) 14,290
2018	(17.49% x \$100,000) 17,490	(14.29% x \$100,000) 14,290
2019	(12.49% x \$100,000) 12,490	(14.29% x \$100,000) 14,290
2020	( 8.93% x \$100,000) 8,930	(14.29% x \$100,000) 14,290
2021	( 8.92% x \$100,000) 8,920	(14.29% x \$100,000) 14,290
2022	( 8.93% x \$100,000) 8,930	(14.29% x \$100,000) 14,290
2023	( 4.46% x \$100,000) 4,460	( 7.15% x \$100,000) 7,110
Total	<u>\$100,000</u>	<u>\$100,000</u>

**Instructors Note: This problem is also used in Chapter 15 (problems 77 and 78) to illustrate the alternative minimum tax.**

52. Guadalupe purchases an office building to use in her business at a cost of \$520,000. She properly allocates \$20,000 of the cost to the land and \$500,000 to the building. Assuming that Guadalupe would like to deduct the maximum depreciation on the building, what is her first-year depreciation on the building if she purchases the building on

a. June 30, 1992?

**The property is classified as 31.5-year nonresidential real estate because it is placed into service after 1986 and before May 13, 1994. The depreciation rate for month 6 and year one of Table A10-8, is 1.720%. Multiplying this rate by the depreciable basis of \$500,000 results in the first-year depreciation on the building of \$8,600.**

$$\text{\$500,000 basis of the building} \times 1.720\% = \text{\$8,600}$$

b. June 30, 1994?

**Because the property is placed into service after May 12, 1994, the classification is 39-year nonresidential real estate. The depreciation rate for month 6 and year 1 of Table A10-9 is 1.391%. Accordingly, the first-year depreciation on the building is \$6,955:**

$$\text{\$500,000 basis of the building} \times 1.391\% = \text{\$6,955}$$

53. Refer to problem 52. Guadalupe sells the building on October 26, 2016. What is her 2016 depreciation deduction if she purchased the building on

a. June 30, 1992?

**Real property uses the mid-month convention. In the year of disposition, the property is deemed in service for 9.5 months resulting in a depreciation percentage of 2.514% [ $3.175\% \times (9.5 \div 12)$ ] calculated using Table A10-8. Therefore, the depreciation deduction is \$12,570:**

$$\text{\$500,000 depreciable basis} \times 2.514\% = \text{\$12,570}$$

b. June 30, 1994?

**In the year of disposition, the property is in service for 9.5 months as per the mid-month convention resulting in a depreciation percentage of 2.030% [ $2.564\% \times (9.5 \div 12)$ ] calculated using Table A10-9. Therefore, the depreciation deduction is \$10,149:**

$$\text{\$500,000 depreciable basis} \times 2.030\% = \text{\$10,149}$$

54. Anton purchases a building on May 4, 1999, at a cost of \$270,000. The land is properly allocated \$30,000 of the cost. Anton sells the building on October 18, 2016, for \$270,000. What is his gain or loss on the sale if he uses the regular MACRS system and the building is

a. An apartment building?

b. An office building?

An apartment building is 27.5 year residential rental property and an office building purchased after May 12, 1994, is 39 year real property. Using the depreciation columns for month 5 of Tables A10-7 and A10-9 gives the following depreciation schedules:

		a.		b.	
Year	Depreciable Basis	Apartment Depreciation Percentage	Apartment Depreciation Deduction	Office Depreciation Percentage	Office Depreciation Deduction
1999	\$ 240,000	2.2730%	\$ 5,455	1.605%	\$ 3,852
2000	\$ 240,000	3.6360%	8,726	2.564%	6,154
2001	\$ 240,000	3.6360%	8,726	2.564%	6,154
2002	\$ 240,000	3.6360%	8,726	2.564%	6,154
2003	\$ 240,000	3.6360%	8,726	2.564%	6,154
2004	\$ 240,000	3.6360%	8,726	2.564%	6,154
2005	\$ 240,000	3.6360%	8,726	2.564%	6,154
2006	\$ 240,000	3.6360%	8,726	2.564%	6,154
2007	\$ 240,000	3.6360%	8,726	2.564%	6,154
2008	\$ 240,000	3.6370%	8,729	2.564%	6,154
2009	\$ 240,000	3.6360%	8,726	2.564%	6,154
2010	\$ 240,000	3.6370%	8,729	2.564%	6,154
2011	\$ 240,000	3.6360%	8,726	2.564%	6,154
2012	\$ 240,000	3.6370%	8,729	2.564%	6,154
2013	\$ 240,000	3.6360%	8,726	2.564%	6,154
2014	\$ 240,000	3.6370%	8,729	2.564%	6,154
2015	\$ 240,000	3.6360%	8,726	2.564%	6,154
2016	\$ 240,000	2.8793%*	6,910	2.030%	4,872
Total Depreciation			<u>\$151,993</u>		<u>\$107,188</u>

Gain on Sale Calculation:

	Apartment Building	Office Building
Selling Price	\$ 270,000	\$ 270,000
Adjusted Basis:		
\$270,000 - \$151,993 =	(118,007)	(162,812)
\$270,000 - \$107,188 =		
Gain on Sale	<u>\$ 151,993</u>	<u>\$ 107,188</u>

\* Real Property uses the mid-month convention. In the year of disposition, the property is deemed in service for 9.5 months resulting in an apartment depreciation percentage of 2.8793% [ $3.637\% \times (9.5 \div 12)$ ] and an office building percentage of 2.030% [ $2.564\% \times (9.5 \div 12)$ ].

NOTE: You will need the depreciation calculations from this problem to complete problem 67 in Chapter 11.

- c. How would your answers to parts a and b change if Anton makes a straight-line election on the building? Explain.

**MACRS real property is depreciated using the straight-line method. However, an election can be made to depreciate the property straight-line over the Alternate Depreciation System (ADS) life. If Anton elects to use the ADS, he will calculate his depreciation on the building using the straight-line method over 40 years (2.5% per year) using the mid-month convention:**

<u>Year</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation Deduction</u>
1999	\$ 240,000	1.5625%*	\$ 3,750
2000-2015	\$ 240,000	2.5000%	96,000
2016	\$ 240,000	1.9790%*	4,750
<b>Total Depreciation</b>			<b><u>\$104,500</u></b>

- \* Real Property uses the mid-month convention. In the year of acquisition, the property is deemed in service for 7.5 months ( $2.5\% \times 7.5 \div 12 = .015625\%$ ). The rate must be calculated because an IRS table is not being used. In the year of disposition, the property is in service for 9.5 months ( $2.5\% \times 9.5 \div 12 = 1.979\%$ ). As in the year of acquisition, the depreciation rate must be calculated for the year of disposition.

**Anton will have a basis in the land and building of \$165,500 (\$270,000 - \$104,500). His gain on the sale is \$104,500 (\$270,000 - \$165,500)].**

55. On March 1, 2016, Babar Inc., pays \$1,200,000 for a store building, moves into the building and begins business on April 1. Babar properly allocates \$1,000,000 of its cost to the building and \$200,000 to the land. On May 21, 2016, it installs \$523,000-worth of new display shelving. Babar wants to claim the maximum allowable depreciation on the property it purchased. On January 2, 2019, Babar sells the land and building for \$1,400,000 and the display shelving for \$45,000.

- a. What is Babar's maximum depreciation deduction for 2016?

**The building is 39-year real property. The 2016 depreciation is calculated using the month 4 (the property is not placed in service until April) column of Table A10-9. The 2016 deduction on the building is \$18,190 (\$1,000,000 x 1.819%).**

**From Table A10-1, store shelving would be in general asset class 01.1 and would have a 7-year MACRS life. The appropriate depreciation schedule is Table A10-2. Babar should elect to expense \$500,000 of the cost of the shelving (assuming that it has at least \$500,000 of income) This will give a depreciation deduction for 2016 of \$521,477:**

<b>Election to expense shelving</b>		<b>\$500,000</b>
<b>Depreciable basis (\$523,000 - \$500,000)</b>	<b>\$23,000</b>	
<b>1st year depreciation (Table A10-2)</b>	<b><u>x 14.29%</u></b>	<b>3,287</b>
<b>Total cost recovery of shelving</b>		<b>\$ 503,287</b>
<b>Depreciation of building</b>		<b>18,190</b>
<b>Total 2016 depreciation</b>		<b><u>\$ 521,477</u></b>

- b. What is Babar's maximum depreciation deduction for 2019?

The 4th year of use is 2019. The year 4 depreciation percentages are used to calculate the depreciation for the entire year. Because the building and the shelving were sold in January, the applicable disposition year convention for each property must be applied to determine the 2019 depreciation. The store shelving is tangible personal property and is 7-year property in recovery year 4 (Table A10-2). The building is real property and uses the mid-month convention. The 2019 depreciation deduction is \$2,505:

Building -	\$1,000,000 x 2.564%	= \$25,640 x (.5 ÷ 12)	\$ 1,068
Shelving -	\$ 23,000 x 12.490%	= \$2,873 x ½ year	1,437
Total 2019 depreciation			<u>\$2,505</u>

- c. What is Babar's gain or loss on the sale of the land and building?

To calculate the gain or loss on the sale of the land and the building, the adjusted basis of the building at the sale date must be determined. This requires the calculation of the depreciation deducted on the building for 2016 through 2019. The depreciation calculations for 2016 and 2019 were done in parts a and b. For 2017 and 2018, the depreciation deduction is \$25,640 (\$1,000,000 x 2.564%) per year. The total depreciation taken is \$70,538 [\$18,190 + (\$25,640 x 2) + \$1,068] and the adjusted basis of the building is \$929,462. The total adjusted basis of the land and the building is \$1,129,462 (\$929,462 + \$200,000), resulting in a gain on sale of \$270,538:

Selling price			\$1,400,000
Less: Adjusted basis			
Land		\$200,000	
Building	\$1,000,000		
Less: Depreciation	<u>(70,538)</u>	<u>929,462</u>	<u>( 1,129,462)</u>
Gain on sale			<u>\$ 270,538</u>



d. What is Babar's gain or loss on the sale of the shelving?

**The adjusted basis of the shelving must be calculated. This requires calculation of the depreciation deducted from 2016 through 2019:**

<u>Year</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation Deduction</u>
2016	Election to Expense		\$500,000
2016	\$23,000	14.29%	3,287
2017	\$23,000	24.49%	5,633
2018	\$23,000	17.49%	4,023
2019	\$23,000	6.25%*	1,438
<b>Total Depreciation</b>			<b><u>\$ 514,381</u></b>

**Calculation of Gain on Sale:**

Selling price		\$ 45,000
Less: Adjusted basis:		
Original basis	\$523,000	
Less: Depreciation	<u>(514,381)</u>	8,619
Gain on sale		<b><u>\$ 36,381</u></b>

\* Limited to a half-year's depreciation ( $12.49\% \times \frac{1}{2}$ ) in year of sale.

56. On June 1, 2015, Kirsten buys an automobile for \$60,000. Her mileage log for the year reveals the following: 20,000 miles for business purposes; 7,000 miles for personal reasons; and 3,000 miles commuting to and from work. What is Kirsten's maximum cost-recovery deduction for 2015?

**Kristen's depreciation deduction on the automobile is limited in two ways. First, only the business portion of the basis may be depreciated. Therefore, only \$40,000 [ $\$60,000 \times (20,000 \div 30,000)$ ] of the basis is depreciable. The 3,000 miles she travels commuting are considered personal miles. Because the automobile is used more than 50% for business use, regular MACRS depreciation may be used, but the deduction each year is limited. Using regular MACRS (Table A10-2 for 5-year property), Kristen's first-year depreciation deduction is limited to \$2,107.**

Initial basis	\$60,000
Business use percentage	x 66.67%
Business depreciable basis	<u>\$40,000</u>
MACRS % (Table A10-2)	x 20%
MACRS depreciation	<u>\$ 8,000</u>

Annual depreciation limit for auto (Table A10-10)	\$3,160
Kristen's business use percentage	x 66.67%
Kristen's maximum depreciation on auto in 2015	<u>\$ 2,107</u>

**Instructor's Note:** After the book went to press, the 2016 maximum deduction limitations were released. The 2016 maximum deduction was \$3,160. Bonus depreciation was not elected.

57. On May 15, 2015, Lurlene buys a used automobile for \$17,000. She drives it, 9,000 miles for business and 3,000 miles for personal trips during the year. What is Lurlene's maximum cost recovery for 2015?

To use regular MACRS, listed property must be used more than 50% in a trade or business use. Lurlene's automobile is listed property and her business usage is 75% ( $9,000 \div 12,000$  miles). Lurlene could elect to expense the car under Section 179; however, this is not a good choice since the deduction is subject to the passenger automobile limitation. Automobiles are 5-year property and regular MACRS depreciation is calculated using Table A10-2. The MACRS deduction is \$2,550 in 2015 and is limited to \$2,370.

Initial basis	\$17,000
Business use percentage	x 75%
Business depreciable basis	\$12,750
MACRS % (Table A10-2)	x 20%
Total MACRS depreciation	<u>\$ 2,550</u>

Annual depreciation limit for auto (Table A10-10)	\$3,160
Lurlene's business use percentage	x 75%
Lurlene's maximum depreciation on auto in 2015	<u>\$2,370</u>

**Instructor's Note:** After the book went to press the 2016 maximum deduction limitations were released. The 2016 maximum deduction was \$3,160. Bonus depreciation was not elected.

58. On July 4 of the current year, Lawrence invests \$240,000 in a mineral property. He estimates that he will recover 800,000 units of the mineral from the deposit. During the current year, Lawrence recovers and sells 100,000 units of the mineral for \$3.50 per unit.
- a. What are Lawrence's cost depletion deduction for the current year and his adjusted basis for the mineral deposit after deducting depletion?

**Cost depletion is calculated using the units of production method. Each year the remaining depreciable basis is allocated based on the formula:**

$$\frac{\text{Units Recovered During the Year}}{\text{Total Estimated Units Remaining}}$$

**For Lawrence, this results in a deduction for cost depletion of \$30,000.**

$$\$240,000 \times \frac{100,000}{800,000} = \$30,000$$

**Lawrence's basis in the mineral property after deducting depletion is \$210,000 (\$240,000 - \$30,000).**

- b. If the percentage depletion rate for the mineral is 10%, what are his depletion deduction for the current year and his adjusted basis for the mineral deposit after deducting depletion?

**Percentage depletion is calculated by multiplying the selling price of the mineral by the statutory rate for the mineral. Lawrence's sales are \$350,000 (100,000 x \$3.50) and his percentage depletion is \$35,000 (\$350,000 x 10%). Lawrence's basis in the property after deducting percentage depletion is \$205,000 (\$240,000 - \$35,000).**

- c. If the statutory percentage depletion rate for the mineral is 10% and Lawrence's income from the mineral before the depletion deduction is \$9,200, what are his depletion deduction for the current year and his adjusted basis for the mineral deposit after deducting depletion?

**The percentage depletion deduction cannot exceed 50% of the taxable income from the mineral property before the percentage depletion deduction. Lawrence's percentage depletion deduction is limited to \$4,600 (\$9,200 x 50%). Cost depletion is not subject to an income limitation. Therefore, Lawrence should deduct the \$30,000 cost depletion calculated in part a to maximize his depletion deduction.**

59. Isidro purchases an interest in an oil-producing property for \$100,000 on November 3. His geologist estimates 15,000 barrels of oil are recoverable. The entity sells 1,000 barrels for \$20,000 during November and December of the year of acquisition. Assume the percentage depletion rate for oil is 15%. Operating expenses related to the revenues are \$3,000.
- a. Advise Isidro on the amount of depletion he should deduct in the year of acquisition.

**Cost depletion is calculated on a units of production method. Each year the remaining depreciable basis is allocated based on the formula:**

$$\frac{\text{Units Recovered During the Year}}{\text{Total Estimated Units Remaining}}$$

**For Isidro, this results in a deduction for cost depletion of \$6,667.**

$$\$100,000 \times (1,000 \div 15,000) = \$6,667$$

**Isidro's adjusted basis in the oil reserves after deducting depletion is \$93,333 (\$100,000 - \$6,667).**

**Percentage depletion is calculated by multiplying the selling price of the oil by the statutory rate for the oil. Isidro's sales are \$20,000 and his percentage depletion is \$3,000 (\$20,000 x 15%). Isidro's adjusted basis in the property after deducting percentage depletion is \$97,000 (\$100,000 - \$3,000). Isidro should use cost depletion because it provides him with a greater deduction.**

- b. At the end of the second year, the geologist estimates the remaining number of recoverable barrels is 18,000. Isidro has an offer of \$190,000 for his investment. In the second year, the entity sold only 3,000 barrels of oil. Gross revenues were \$50,000 and operating expenses totaled \$4,000. If Isidro sells the property, what is the amount of his realized gain?

**Isidro's cost depletion is \$15,556.**

$$\$93,333 \text{ adjusted basis} \times (3,000 \div 18,000) = \$15,556.$$

**Isidro's adjusted basis is \$77,777 (\$93,333 - \$15,556) at year end. If Isidro sells his investment for \$190,000, he will realize a gain of \$112,223 (\$190,000 - \$77,777).**

**Using percentage depletion, Isidro's depletion amount is \$7,500 (\$50,000 x 15%). Therefore, his adjusted basis becomes \$92,500 (\$100,000 - \$7,500). The sale of the investment realizes a gain of \$97,500 (\$190,000 - \$92,500).**

- c. Write a memorandum explaining the details of Isidro's gain. Include a recommendation about whether he should accept the offer.

**The memo should contain an explanation of the calculation of the cost depletion for both years focusing on why that approach is superior to the percentage depletion approach in the present situation. Isidro's offer for the asset of \$190,000 is low when compared to the estimated remaining reserves of 18,000 barrels. If 4,000 barrels generate about \$70,000 in revenues, then the 18,000 barrels could generate about \$315,000  $[(\$70,000 \div 4,000) \times 18,000]$  before expenses. Also, Isidro will be able to deplete the oil when extracted. If he chooses to use the percentage depletion method, he can deplete an amount greater than the basis of the investment. The sales offer seems reasonable only if Isidro is in need of cash quickly.**

60. On June 2, 2016, Lokar Corporation purchases a patent for \$68,000 from the inventor of a new extrusion process. The patent has 12 years remaining on its legal life. Also, Lokar purchases substantially all of the assets of Barrios Corporation for \$750,000 on September 8, 2016. The values of the assets listed in the purchase agreement are as follows:

Inventory	\$250,000
Manufacturing equipment	686,000
Patent on compression process	105,000
Goodwill	95,000

Determine the maximum 2016 cost-recovery deductions for the assets purchased.

**Intangible assets purchased in connection with the acquisition of a business are amortized over 15 years and the basis of identifiable assets is equal to their purchase price. The purchased patent and goodwill qualify for the 15 year amortization beginning with the month of acquisition. The patent acquired separately (from the inventor) is amortized over the remaining useful life.**

**Manufacturing Equipment:**

Election to expense		\$ 500,000
Depreciable basis (\$686,000 - \$500,000)	186,000	
1st year depreciation rate (Table A10-2)	<u>x 14.29%</u>	<u>26,579</u>
Total depreciation		<u>\$ 526,579</u>

**Goodwill and Patent on Compression Process:**

Allocated cost	\$200,000
Amortization rate [(1 year ÷ 15 years) x (4 ÷ 12)]	<u>x 2.22%</u>
Amortization	<u>\$ 4,440</u>

**Patent on Extrusion Process:**

Allocated cost	\$ 68,000
Amortization rate [(1 year ÷ 12 years) x (7 ÷ 12)]	<u>x 4.86%</u>
Amortization	<u>\$ 3,305</u>

**Total 2016 cost recovery deduction (i.e., depreciation and amortization) is \$534,324 (\$500,000 + 26,579 + \$4,440 + 3,305).**

61. On April 18, 2016, Petros buys all the assets of Brigid's Muffler Shop. Included in the purchase price of \$295,000 is a payment of \$20,000 to Brigid not to open a competing shop in the state for a period of 5 years. Brigid's assets at the date of sale are as follows:

Asset	Adjusted basis	Fair Market Value
Inventory	\$ 8,500	\$ 10,000
Equipment	3,500	30,000
Building	80,000	120,000
Patent	500	15,000
Land	5,000	10,000

The patent is on a special muffler that Brigid developed and patented 5 years ago. Petros would like to know the maximum amount of the deduction he will be allowed on the purchase of Brigid's assets for 2016.

Petros paid \$295,000 for assets worth \$205,000 (including the \$20,000 covenant not to compete). Because he paid more than the fair market value of the identifiable assets, the \$90,000 excess is goodwill and is amortized over 15 years. The basis of the identifiable assets is equal to their fair market value. The inventory is not depreciable. The equipment is 7-year MACRS property and is eligible for expensing under Section 179. The building is 39 year MACRS real property. Because the patent is purchased with the other business assets, it must be amortized over 15 years even though the remaining useful life is only 12 years. The covenant not to compete is an intangible asset and must be amortized over the 15 year statutory period. All amortization periods begin on the date of purchase. Because Petros bought the assets after the middle of April, he is allowed only 8 months (May through December) of amortization on the intangible assets in 2016. Its maximum allowable cost-recovery deductions on the assets for 2016 are as follows:

**Equipment:**

Election to Expense	\$ 30,000
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**Building:**

Depreciable basis	\$ 120,000	
1st year depreciation (Table A10-9)	x 1.819%	2,183

**Amortization:**

Goodwill (\$90,000 ÷ 15) x (8 ÷ 12)	4,000
Patent (\$15,000 ÷ 15) x (8 ÷ 12)	667
Covenant Not to Compete (\$20,000 ÷ 15) x (8 ÷ 12)	889
Total 2016 Depreciation and Amortization Deduction	<u>\$ 37,739</u>



62. On October 1 of the current year, Lee Corporation enters negotiations with Kay Corporation to acquire a patent. The patent has 10 years remaining on its legal life.
- a. If Lee Corporation purchases the patent for \$36,000, how much amortization expense may Lee Corporation deduct in the current year?

**A patent not acquired in the purchase of a trade or business is amortized over the 10 year remaining useful life. Lee Corporation's current amortization deduction is \$900 [ $\$36,000 \div 10 \text{ years} \times (3 \div 12)$ ].**

- b. Assume that Lee Corporation purchases all of the assets of Kay Corporation for \$510,000. All of the identifiable assets of Kay Corporation had a fair market value of \$420,000, including the patent, which has a fair market value of \$36,000. Also, a covenant not to compete for 3 years costing \$72,000 is included in the purchase agreement. How much amortization expense may Lee Corporation deduct in the current year?

**Intangible assets that are acquired in connection with the purchase of assets constituting a trade or business are generally subject to the 15-year amortization period. Since the covenant not to compete was acquired in connection with the purchase of a trade or business, it is amortized over 15 years and not the actual term of the agreement (i.e., 3 years). The intangible assets purchased by Lee Corporation are amortized over 15 years:**

Patent	\$ 36,000
Covenant not to compete	72,000
Goodwill (\$510,000 - \$420,000)	90,000
Total Costs to be Amortized	<u>\$198,000</u>

**Current amortization expense:**

$$[(\$198,000 \div 15 \text{ years}) \times (3 \div 12)] = \underline{\underline{\$ 3,300}}$$

**ISSUE IDENTIFICATION PROBLEMS**

In each of the following problems, identify the tax issue(s) posed by the facts presented. Determine the possible tax consequences of each issue that you identify.

63. Bailey Construction Company purchases a bulldozer on December 20, 2016. An ice storm delays delivery until December 24. Because of the holidays, the equipment is not used until January 2.

**The issue is determining when the equipment was placed into service. The question is whether the asset can begin to be depreciated in the year it was purchased and delivered or when it actually was used on a construction project in January. Since the equipment was not placed in service until January, depreciation cannot be claimed prior to that date.**

64. Jason is transferred to another city to work and is unable to sell his house. He rents out the house until it is sold.

**The issue is whether the house qualifies as rental property that can be depreciated under the business purpose concept. Additional information is needed about the rental, including the period of time it was rented to tenants.**

65. Gates, Inc., purchases a painting by a 16<sup>th</sup>-century Italian artist and displays it in the corporate headquarters.

**The issue is whether the painting has a determinable useful life. If the painting has a useful life, then it may qualify for depreciation. If it doesn't, the painting is treated similar to a stock and under the capital recovery concept Gates would recover its investment when it sells the painting.**

66. During 2016, Schottenheim Corporation buys laptop computers and desktop computers to use in its general sales offices. Schottenheim buys laptops for \$42,000 on March 29, additional laptops for \$18,000 on September 26, and the desktop computers for \$510,000 on October 5. The corporation makes no other capital expenditures this year.

**The two issues are whether the computers are considered listed property and how can Schottenheim maximize its depreciation deduction. These computers are not considered listed property because they are used exclusively in the business at a regular business establishment. Schottenheim can maximize its cost recovery deduction by electing to expense \$500,000 of the cost of the desktop computers. In doing so they avoid the problem of placing in service more than 40% of its assets in the last quarter ( $\$510,000 \div \$570,000 = 89\%$ ), and having to use the mid-quarter convention. Schottenheim's depreciable basis in the desktops is \$10,000 ( $\$510,000 - \$500,000$ ).**

67. GM Corporation purchases equipment costing \$18,000 and wants to claim the maximum deduction possible for this expenditure.

**The issue is how can GM maximize its current years' depreciation deduction. If GM wants the maximum deduction possible, then it should claim bonus depreciation, make a Section 179 election, and expense up to \$500,000 of the cost of the assets acquired. To qualify, GM must meet all of the requirements of Section 179. Thus, their qualifying acquisitions for the year cannot exceed \$2,500,000 (2016 limit). In addition, the Section 179 deduction is limited to their taxable active business income for the year. If GM meets these qualifications, then they must also decide if expensing this asset provides the greatest tax advantage. It is best to expense the asset with the longest recovery period, so the recovery period of this equipment should be compared to the recovery periods of other assets purchased during the year.**

**If GM does not qualify for Section 179 expensing or decides it is preferable to expense another asset, then GM should elect to recover the cost using regular MACRS. The \$18,000 depreciable basis should be recovered using regular MACRS depreciation.**

68. Oliver Company obtains a patent by paying \$15,000 on June 21 of this year.

**One issue relates to the remaining useful life of the asset. If the seller had used the patent, then Oliver will amortize the cost of the patent over the years remaining in the useful life. If the patent was acquired as part of a purchase of the assets of a business then it is amortized over 15 years. Another issue is whether Oliver can claim an entire year's amortization and will have to claim only a partial year's expense.**

69. **TAX SIMULATION** Dawkins Logging Company buys 400 acres of forest land for \$50,000. The purchase price is allocated as follows: \$10,000 to the land and the remaining \$40,000 to the timber. At the time of purchase, there was an estimated 400,000 board feet of timber on the land. During the first year, Dawkins cuts and sells 100,000 board feet of timber off the land.

Required: Determine the depletion deduction that Dawkins will be allowed to claim for the first year. Search a tax research database and find the relevant authority (ies) that forms the basis for your answer. Your answer should include the exact text of the authority (ies) and an explanation of the application of the authority to Dawkin's facts. If there is any uncertainty about the validity of your answer, indicate the cause for the uncertainty.

**Reg Sec. 1.611-1 states that only cost depletion, not percentage depletion, is allowed with respect to standing timber.**

*Section 611 provides that there shall be allowed as a deduction in computing taxable income in the case of mines, oil and gas wells, other natural deposits, and timber, a reasonable allowance for depletion. In the case of standing timber, the depletion allowance shall be computed solely upon the adjusted basis of the property.*

**Reg. Sec. 1.611-3(b) describes the computation of the allowance for depletion of timber as follows:**

*The depletion unit of the timber for a given timber account in a given year shall be the quotient obtained by dividing (i) the basis provided by section 1012 and adjusted as provided by section 1016, of the timber on hand at the beginning of the year plus the cost of the number of units of timber acquired during the year plus proper additions to capital, by (ii) the total number of units of timber on hand in the given account at the beginning of the year plus the cost of the number of units of timber acquired during the year plus the number of units acquired during the year plus (or minus) the number of units required to be added (or deducted) by way of correcting the estimate of the number of units remaining available in the account. The number of units of timber of a given timber account cut during any taxable year multiplied by the depletion unit of that timber account applicable to such year shall be the amount of depletion allowable for the taxable year.*

**Sec. 1012 provides that:**

*The basis of property shall be the cost of such property ...*

**Sec. 1016(a) describes adjustments that must be made to basis.**

(a) General rule. *Proper adjustment in respect of the property shall in all cases be made—*

(1) *for expenditures, receipts, losses, or other items, properly chargeable to capital account, but no such adjustment shall be made—*

(A) *for taxes or other carrying charges described in [section 266](#), or*

**(B) for expenditures described in [section 173](#) (relating to circulation expenditures), for which deductions have been taken by the taxpayer in determining taxable income for the taxable year or prior taxable years;**

**(2) in respect of any period since February 28, 1913, for exhaustion, wear and tear, obsolescence, amortization, and depletion, to the extent of the amount—**

**(A) allowed as deductions in computing taxable income under this subtitle or prior income tax laws, and**

**(B) resulting (by reason of the deductions so allowed) in a reduction for any taxable year of the taxpayer's taxes under this subtitle (other than chapter 2, relating to tax on self-employment income), or prior income, war-profits, or excess-profits tax laws, but not less than the amount allowable under this subtitle or prior income tax laws. Where no method has been adopted under [section 167](#) (relating to depreciation deduction), the amount allowable shall be determined under the straight line method. [Subparagraph \(B\) of this paragraph](#) shall not apply in respect of any period since February 28, 1913, and before January 1, 1952, unless an election has been made under section 1020 (as in effect before the date of the enactment of the Tax Reform Act of 1976). Where for any taxable year before the taxable year 1932 the depletion allowance was based on discovery value or a percentage of income, then the adjustment for depletion for such year shall be based on the depletion which would have been allowable for such year if computed without reference to discovery value or a percentage of income;**

Applying these rules to Dawkin's depletion deduction, his basis at the beginning of the year under Sec. 1012 is his cost of \$40,000 and there are no adjustments required under Sec. 1016. The computation under Reg. Sec. 1.611-1 is \$40,000/400,000 board feet or \$.10 per board foot. The depletion deduction is \$.10 x 100,000 board feet cut or \$10,000.

70. **INTERNET ASSIGNMENT** Articles on tax topics are often useful in understanding the income tax law. CPA firms and other organizations publish tax articles on the Internet. Using a search engine or one of the tax directory sites provided in Exhibit 16-6 (Chapter 16), find an article that discusses the Section 179 election to expense. Trace the process you used to find the article (search engine or tax directory used and key words). Summarize the information contained in the article.

**The following articles discuss this issue:**

“Understanding the Section 179 Deduction” at <http://section179.org> (current rates)

“Section 179” at <http://www.taxguru.org/incometax/Rates/Sec179.htm>

A unique article: “Why Not Have Uncle Sam Help You Buy Your Alpacas” at <http://alpacas.com/Resources/TaxPlanner.aspx> (rates are not current)

Please note that most of the articles on Section 179 are not current as to the maximum amount of the annual election to expense. However, the other information in the article generally reflects current law.

**INSTRUCTOR’S NOTE:** Information on the Internet is developing at a rapid pace. Therefore, this solution may become outdated. We suggest that you do the assignment prior to assigning it to your students. This will allow you to provide students with any additional information they may need to complete the assignment.

71. **INTERNET ASSIGNMENT** Search the Internet for articles relating to the amortization of intangible assets. Trace the process you used to find the article (search engine or tax directory used). Summarize the information found in your research.

**The following articles discuss this issue:**

Publication 535, “Business Expenses,” <https://www.irs.gov/pub/irs-pdf/p535.pdf>. Ch 08

“Treatment of Capitalized Costs of Intangible Assets” by Larry Witner, The Tax Adviser, April 1, 2007,

<http://www.thetaxadviser.com/issues/2007/apr/treatmentofcapitalizedcostsofintangibleassets-parti.html>.

**INSTRUCTOR’S NOTE:** Information on the Internet is developing at a rapid pace. Therefore, this solution may become outdated. We suggest that you do the assignment prior to assigning it to your students. This will allow you to provide students with any additional information they may need to complete the assignment.

72. **RESEARCH PROBLEM.** Your client purchases land that has been severely eroded. He plans to fill the holes caused by the erosion with waste material. Prepare a memorandum discussing any cost recovery deductions that can be claimed on this property.

In *John Sexton*, 42 TC 1094 (1964), a garbage and refuse dump operator was allowed to claim depreciation on clay pit excavations since the usefulness of the land would be gradually exhausted as the holes were filled. The IRS acquiesced to the decision (1970-2 CB xxi). The IRS has also allowed depreciation of an open-pit mine purchased as a dumping ground (Rev. Rul. 74-282, 1974-1 CB 150). In addition, The Tax Court has allowed depreciation of landfill facilities (*Browning-Ferris Industries Inc.*, TC Memo 1987-147). In *H. Kendrick Sanders*, 75 TC 157 (1980), natural holes, which were filled with dirt and debris, were depreciated by calculating the volume of dirt and debris dumped each year and the property's decline in value as a result of dumping.

73. **RESEARCH PROBLEM** Your client, Stone Mining Company, comes to you with a tax planning idea. This year's mining revenues are disappointing, but the company is very optimistic that next year's mining revenues will increase dramatically. To avoid concern among shareholders, Stone Mining wants to minimize expenses this year to make its income appear higher. Therefore, it plans to claim no depletion expense this year and to claim depletion next year under both the percentage and cost depletion methods. Another alternative it is considering is to claim cost depletion this year because it is lower than the percentage method. Prepare a written memorandum discussing whether either of these plans will succeed.

Neither of these plans will be successful. The cost of natural resources can be recovered using either the cost or percentage depletion methods in a taxable year, but not both (Rev. Rul. 68-430, 1968-2 CB 44; *U.S. v. Dakota-Montana Oil Co*, 287 US 591(1933), 12 AFTR 18, revg. 59 F2d 853 (1932, Ct. Cl.) 11 AFTR 598. Thus, they will not be allowed to claim depletion under both methods in the same tax year.

The second plan will not work. If property is entitled to either cost or percentage depletion, the allowable depletion deduction is the greater of the two (Sec. 613; Reg. Sec. 1.613-1).

**INTEGRATIVE PROBLEMS****74. Emelio and Charita's Assets****Emelio's Business Assets:****Asset: Building/Land****Date Acquired: March 15, 2016****Initial Basis: Land = \$30,000; Building = \$93,000****Depreciation Life: 39 years MACRS****Depreciation Deducted to December 31, 2016: \$1,891****Basis on December 31, 2016: Building - \$91,109 Land - \$30,000****Depreciation Schedule - (Table A10-9):**

<u>Year</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation</u>
<u>2016</u>	<u>\$93,000</u>	<u>2.033%</u>	<u>\$1,891</u>

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**Asset: Computer Equipment****Date Acquired: April 3, 2016****Initial Basis: \$20,000****Depreciation Life: 5 Year MACRS****Depreciation Deducted to December 31, 2016: \$4,000****Basis on December 31, 2016: \$16,000****Depreciation Schedule - (Table A10-2)**

<u>Year</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation</u>
<u>2016</u>	<u>\$20,000</u>	<u>20%</u>	<u>\$4,000</u>

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**Asset: Printer****Date Acquired: April 1, 2016****Initial Basis: Gain - \$8,000, Loss and Depreciation - \$4,000****Depreciation Life: 5 Year MACRS****Depreciation Deducted to December 31, 2016: \$800****Basis on December 31, 2016: \$3,200****Depreciation Schedule - (Table A10-2)**

<u>Year</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation</u>
<u>2016</u>	<u>\$4,000</u>	<u>20%</u>	<u>\$800</u>

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**Asset: Office Furniture****Date Acquired: March 30, 2016****Initial Basis: \$2,200****Depreciation Life: 7 Year MACRS****Depreciation Deducted to December 31, 2016: \$314****Basis on December 31, 2016: \$1,886****Depreciation Schedule - (Table A10-2)**

<u>Year</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation</u>
<u>2016</u>	<u>\$2,200</u>	<u>14.29%</u>	<u>\$314</u>



**Charita's Business Assets:****Asset: Automobile****Date Acquired: January 2016****Initial Basis:  $\$21,000 \times (6,800 \div 10,000) = \$14,280$** **Depreciation Life: MACRS 5-year****Depreciation Deducted to December 31, 2016: \$2,149****Basis on December 31, 2016: \$12,131****Depreciation Schedule: - (Table A10-2)**

<u>Year</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation</u>
<b>2016</b>	<b>\$14,280</b>	<b>20%</b>	<b>\$2,149</b>

\* The maximum amount of depreciation cannot exceed the percentage of business use times the maximum depreciation amount \$2,149 (\$3,160 x 68%).

**Asset: Home Office****Date Acquired: June 2011****Initial Basis: \$7,200****Depreciation Life: 39 Year MACRS****Depreciation Deducted to December 31, 2016: \$1,025****Basis on December 31, 2016: \$6,175****Depreciation Schedule - (Table A10-9)**

<u>Year</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation</u>
<b>2011</b>	<b>\$7,200</b>	<b>1.391%</b>	<b>\$100</b>
<b>2012</b>	<b>\$7,200</b>	<b>2.564%</b>	<b>\$185</b>
<b>2013</b>	<b>\$7,200</b>	<b>2.564%</b>	<b>\$185</b>
<b>2014</b>	<b>\$7,200</b>	<b>2.564%</b>	<b>\$185</b>
<b>2015</b>	<b>\$7,200</b>	<b>2.564%</b>	<b>\$185</b>
<b>2016</b>	<b>\$7,200</b>	<b>2.564%</b>	<b>\$185</b>

**Investment Assets:****Asset: Rental House****Date Acquired: October, 2008****Initial Basis: Land = \$6,250; Building = \$43,750****Depreciation Life: 27.5 Years MACRS****Depreciation Deducted to December 31, 2016: \$13,060****Basis on December 31, 2016: Land = \$6,250; Building = \$30,690****Depreciation Schedule (Table A10-7):**

<b>Year</b>	<b>Depreciable Basis</b>	<b>Depreciation Percentage</b>	<b>Depreciation Deduction</b>
<b>2008</b>	<b>\$43,750</b>	<b>0.758%</b>	<b>\$ 332</b>
<b>2009</b>	<b>\$43,750</b>	<b>3.636%</b>	<b>\$1,591</b>
<b>2010</b>	<b>\$43,750</b>	<b>3.636%</b>	<b>\$1,591</b>
<b>2011</b>	<b>\$43,750</b>	<b>3.636%</b>	<b>\$1,591</b>
<b>2012</b>	<b>\$43,750</b>	<b>3.636%</b>	<b>\$1,591</b>
<b>2013</b>	<b>\$43,750</b>	<b>3.636%</b>	<b>\$1,591</b>
<b>2014</b>	<b>\$43,750</b>	<b>3.636%</b>	<b>\$1,591</b>
<b>2015</b>	<b>\$43,750</b>	<b>3.636%</b>	<b>\$1,591</b>
<b>2016</b>	<b>\$43,750</b>	<b>3.636%</b>	<b>\$1,591</b>

**Asset: Desmond, Inc. (Inherited Stock)****Date Acquired: 1978 (Tacked-on holding period)****Initial Basis: \$13,300****Asset: Software Corporation Stock****Date Acquired: July, 2009****Initial Basis: \$20.40 per share (\$20,400 Total Basis)****Basis on December 31, 2016: \$10.20 per share (\$20,400 Basis) 2-for-1 stock split****Asset: Flex Corporation Stock****Date Acquired: June 2000 (tacked on holding period)****Initial Basis: \$35 per share (\$3,500 Total Basis)****Personal Use Assets:****Principal Residence:**

<b>Initial Basis</b>	<b>\$120,000</b>
<b>Less: Home Office Basis</b>	<b>(7,200)</b>
<b>Basis on December 31, 2016</b>	<b><u>\$112,800</u></b>

**Charita's Automobile:**

<b>Cost</b>	<b>\$ 21,000</b>
<b>Less: Business Portion</b>	<b>(14,280)</b>
<b>Initial Basis</b>	<b><u>\$ 6,720</u></b>

75. Joy opened a shop to sell concrete yard ornaments in 2012. She converted a building in front of her residence into a store. The fair market value of the building when she opened the store was \$50,000. The land, her house, and the store building cost \$100,000 when she purchased them in 2006. The appraised values in 2006 were as follows: \$10,000 for the store building, \$15,000 for the land, and \$25,000 for the house. In 2013, Joy began traveling to craft shows in her van to sell her ornaments. The van cost \$12,000 in 2009 and had a fair market value of \$5,000 in 2013 when she began using it in the business. She paid \$1,000 in 2013 to modify the van so that it could carry the heavy loads. Her business mileage has remained at 60% of her total mileage since 2013, and she has always used the standard mileage deduction. In 2016, she travels 12,000 miles to craft shows. In January 2016, the manufacturer from whom she purchases her concrete ornaments tells Joy he wants to retire and asks if she is interested in buying his business. Joy believes she can increase her profits by making her own products, and agrees to purchase the business. The negotiated purchase price of the assets is as follows:

Asset	Adjusted Basis	Fair Market Value
Inventory	\$ 5,000	\$ 7,500
Equipment	12,000	18,000

When Joy starts to manufacture the concrete ornaments during the winter of 2016, she finds that she needs a structure in which to work to protect her and the concrete mixture from the cold. She purchases the materials for a barn for \$6,000 and hires laborers to build it for \$4,000

- a. Determine Joy's maximum 2016 cost-recovery deduction on her business assets. Assume that she has always taken the maximum allowable cost-recovery deduction on her business assets but has never had enough business income to elect to expense assets under Section 179. In 2016, Joy estimates that her net business income before any cost-recovery deductions will be at least \$30,000, and she would like to take the maximum allowable deduction in 2016.

**To calculate the 2016 cost-recovery deductions, you must first determine the initial basis of the assets Joy uses in her business and the applicable depreciation or amortization life for each asset.**

**Building converted to store in June of 2013:**

**The store building is 39-year MACRS property. Using the assessed property tax values, the initial basis of the store building is \$20,000 ( $\$100,000 \times \$10,000 \div \$50,000$ ); the land is \$30,000; and the house is \$50,000. The store building was converted to business use in June 2013. The 2016 depreciation is \$513.**

Year	Depreciable Basis	Depreciation Percentage	Depreciation Deduction
2013	\$20,000	1.391%	\$278
2014	\$20,000	2.564%	\$513
2015	\$20,000	2.564%	\$513
2016	\$20,000	2.564%	\$513

**Van Converted to Business Use:**

Since Joy uses the standard mileage rate method, the auto is depreciated using the standard depreciation rate of  $\$.24 \times 12,000 \text{ miles} = \$2,880$ .

Based on the facts of the problem, it is assumed that Joy paid \$25,500 for assets having a fair market value of \$25,500. Therefore, the initial basis of each asset purchased is its fair market value.

<u>Asset</u>	<u>Basis</u>
Inventory	\$ 7,500
Equipment	\$18,000

The inventory is not a depreciable asset. Joy wants to take the maximum allowable deduction for 2016, so she can elect to expense the entire \$18,000 cost of the equipment.

The barn built in December of 2016 is 39-year nonresidential real property. Its depreciable basis is \$10,000 (\$6,000 + \$4,000). The depreciation for the barn is \$11 ( $\$10,000 \times .107\%$  - Table A10-9).

- b. Write a letter to Joy explaining the results of maximizing her 2016 allowable cost-recovery deductions.

By electing to expense the equipment under Section 179 in 2016, Joy's basis in the equipment is zero. Therefore, she cannot take a depreciation deduction in future years. In addition, if she sells the equipment she will recognize a gain. The tax treatment of this gain is discussed in Chapter 11.

**DISCUSSION CASES**

76. Fiona is a professional bass violinist with the St. Paul Symphony Orchestra. In February of the current year, she purchases at auction for \$200,000 an eighteenth-century bass violin built by the renowned Asa Santavar. Fiona is thrilled by her acquisition. The violin is a treasured artwork and a quality investment. Also, it is an asset she will use almost daily in her profession. May Fiona deduct part of her expenditure this year? Explain.

**If Fiona is to deduct the cost of the violin, she must be able to establish that the violin has a definite useful and that the violin is a trade or business asset and not an investment asset. Recently, the U.S. Tax Court in *Richard L. Simon v. Commissioner*, 103 TC 247, (1996) ruled that valuable instruments owned by musicians are tools of their trade that suffer wear and tear. Therefore, musicians can depreciate their instruments just as a business may depreciate plant and equipment. However, the IRS and the chief judge of the Tax Court (who wrote the dissenting opinion) do not agree. The IRS contends that musical instruments are valuable works of art for which there is no set useful life. Also, these types of instruments tend to increase in value and should be considered as investments.**

**NOTE: The above case has been followed in *Brian P. Liddle v. Commissioner*, 65 F3d 299 (3<sup>rd</sup> Cir., 1997), affirming 103 TC 285, (1996). The IRS has indicated that it will seek legislation changing this determination. A possible compromise position is that the violin should be treated as a mixed use asset, part business and part investment.**

77. The tax law provides four methods of cost recovery for assets: (1) immediate deduction of the total cost when paid or incurred; (2) deferral of cost until property is sold or otherwise disposed of; (3) deduction based on a percentage of income from the property over its life; and (4) deduction over a period of years, beginning at date of acquisition, using a consistent method. Discuss each cost recovery method. Provide examples of each method and explain the reasoning underlying each method.

**(1) Examples where an expenditure can be immediately deducted include Section 179 and research and development. This treatment results in a deduction of the expenditure before any revenue is recognized from the expenditure. The purpose in allowing an immediate deduction is to stimulate investment and assist the development of small businesses.**

**(2) The cost of land and securities cannot be recovered until disposition. This treatment is based on the assumption that these assets do not waste away or depreciate in value over their lives. Gain or loss is calculated at the time of sale or disposition. For many years, railroads used a retirement method that resulted in no deduction over the life of the asset until there was a decline in value.**

**(3) Percentage depletion of natural resources is an example where the deduction is based on a percentage of income produced by the asset. This method avoids the problem encountered in cost depletion in estimating the number of recoverable units. Taxpayers benefit because the deduction increases as income rises and the depletion deductions continue even after the full cost of the natural resource has been recovered. The purpose of percentage depletion is to provide incentives to investors and operators to undertake risky drilling and exploration operations and to avoid the problems that resulted from the discovery value depletion deduction. Prior to 1954, discovery value depletion was allowed for minerals. This method permitted the taxpayer to allocate the fair market value of the ore deposit at the time of discovery (even if it exceeded cost) among the recoverable unit in determining the depletion allowance per unit. Allowing total depletion to exceed the actual cost was justified by Congress based on the need for minerals during World War I. The discovery method allowed depletion to offset other sources of income. Controversies arose over limiting the deduction to net income from the asset and as to the discovery value to be used. As a result, the method was replaced by percentage depletion. This history explains why more than the cost of the natural resource can be recovered.**

**(4) Depreciation and the cost method of depletion use a timetable to calculate cost recovery over an arbitrary estimated useful life. From the beginning, income tax laws provided for a reasonable allowance for depreciation by use, wear and tear and later, obsolescence. As attitudes changed about the purpose of depreciation deductions, accelerated methods of cost recovery were eventually allowed. Now the reason for allowing depreciation is not to match revenues and expenses but primarily to stimulate investment in assets and to provide full employment.**

**Instructor's Note: This problem can be assigned as a short and simple written exercise or class discussion question using only the information in the text or it can be assigned as a longer written problem requiring research. The historical development and reasons for these treatments can be found in the tax services, on the Internet and in other reference sources.**

**TAX PLANNING CASES**

78. You are the resident tax expert for Wetzel's Pretzels, an international producer of junk food. The controller has come to you with the company's capital expenditures budget for next year. The budget shows that Wetzel's Pretzels plans to spend \$1,000,000 next year on personal property. The largest single item in the budget is the purchase of new high-tech pretzel twisters costing \$450,000. The pretzel twisters are on order, but because of high demand for the technology, Wetzel's Pretzels will not receive the new twisters until November. The remaining \$550,000 is for company automobiles, delivery trucks, personal computers, and office furniture. These items will be purchased throughout the year as needed.

The controller asks your advice on the tax aspects of these purchases. She is particularly interested in making sure that Wetzel's Pretzels can deduct the maximum amount regarding these purchases in the year of purchase.

How would you advise the controller? That is, are there any tax problems associated with these purchases? If so, suggest one or more ways in which Wetzel's can take advantage of the situation. Write a memorandum to the controller explaining your suggestions.

**The primary problem is that the purchase of the twisters in the 4th quarter will result in the mid-quarter convention being applied  $[(\$450,000 \div \$1,000,000) = 45\%$ , which is greater than 40%]. This will reduce the total amount of depreciation that can be deducted in the year of purchase.**

There are two possibilities for avoiding this result. First, Wetzel's could delay the purchase of the twisters until next year. This would avoid the mid-quarter convention, but would result in no depreciation being taken on the twisters in the current year. The second (and the best) way to take advantage of the situation would be to advise the controller to move the \$550,000 of other personal property purchases into the first quarter of the year. Then the bulk of the assets purchased will be depreciated for 10.5 months and the total deduction will be larger than if the mid-quarter convention did not apply. To illustrate this, assume that all personal property purchases are 5-year MACRS property. If the mid-quarter convention did not apply, the current year depreciation deduction would be \$200,000 ( $\$1,000,000 \times 20\%$ ). If the \$550,000 of other purchases is made in the first quarter and the twisters are placed in service in the fourth quarter, the total depreciation deduction is \$215,000:

<u>Asset</u>	<u>Depreciable Basis</u>	<u>Depreciation Percentage</u>	<u>Depreciation Deduction</u>
Other personal property	\$ 550,000	35.00% (Table A10-3)	\$ 192,500
Twisters	\$ 450,000	05.00% (Table A10-6)	22,500
<b>Total depreciation</b>			<b><u>\$ 215,000</u></b>



79. Joan is interested in buying a special diagnostic machine for use in her medical practice. The machine will cost her \$16,000 and will have a \$2,000 salvage value at the end of its 8-year life. Joan would like to know the actual cost of the machine after considering the effect of the present value of tax savings from depreciation. If she buys the machine, she will place it in service on April 1, 2016. Based on the following assumptions, what is Joan's after-tax cost? Assume that Joan is in the 28% marginal tax rate bracket and that the time value of money is worth 10%. Write a letter to Joan explaining the following options:

- a. Joan will depreciate the machine over 5 years using MACRS.

**Joan needs to calculate the present value of the tax savings from the depreciation at the 10% time value of money (see Table 1-4). This yields a present value tax savings of \$3,462 and a net after-tax cost of the machine of \$12,538 (\$16,000 - \$3,462):**

Year	Basis	Depreciation		28% Tax Savings	PV Factor	PV Tax Savings
		Factor	Deduction			
2016	\$ 16,000	20.00%	\$ 3,200	\$ 896	.909	\$ 814
2017	\$ 16,000	32.00%	5,120	1,434	.826	1,184
2018	\$ 16,000	19.20%	3,072	860	.751	646
2019	\$ 16,000	11.52%	1,843	516	.683	352
2020	\$ 16,000	11.52%	1,843	516	.621	320
2021	\$ 16,000	5.76%	922	258	.564	146
<b>Totals</b>			<b>\$ 16,000</b>	<b>\$ 4,480</b>		<b>\$3,462</b>

- b. Joan will depreciate the machine using the straight-line method over the 7-year ADS life.

**Joan needs to calculate the present value of the tax savings from the depreciation at the 10% time value of money. Using the 7-year straight-line life ( $1 \div 7 = 14.29\%$ ) yields a present value tax savings of \$2,973 and a net after-tax cost of the machine of \$13,027 (\$16,000 - \$2,973):**

Year	Basis	Depreciation		28% Tax Savings	PV Factor	PV Tax Savings
		Factor	Deduction			
2016	\$ 16,000	07.14%	\$ 1,142	\$ 320	.909	\$ 291
2017	\$ 16,000	14.29%	2,286	640	.826	529
2018	\$ 16,000	14.29%	2,286	640	.751	481
2019	\$ 16,000	14.29%	2,286	640	.683	437
2020	\$ 16,000	14.29%	2,286	640	.621	397
2021	\$ 16,000	14.29%	2,286	640	.564	361
2022	\$ 16,000	14.29%	2,286	640	.513	328
2023	\$ 16,000	7.14%	1,142	320	.467	149
<b>Totals</b>			<b>\$ 16,000</b>	<b>\$ 4,480</b>		<b>\$ 2,973</b>

- c. Joan will deduct the \$16,000 investment as an expense in 2016.

**If Joan can deduct the entire cost of the machine in 2016, the present value of the tax saving is greatly enhanced through the time value of money savings. Under this option, Joan saves \$4,480 ( $\$16,000 \times 28\%$ ) in taxes in 2016. The present value of the \$4,480 tax savings is \$4,072 ( $\$4,480 \times .909$ ), resulting in an after-tax cost of \$11,928 ( $\$16,000 - \$4,072$ ).**

**From the preceding calculations, Joan receives the greatest tax benefit if she is able to write-off the entire cost of the machine in the year of purchase. Depreciating the cost of the machine spreads the \$4,480 ( $\$16,000 \times 28\%$ ) tax savings over the depreciation life and reduces the present value of the tax savings.**

**ETHICS DISCUSSION CASE**

80. Steem Advertising Corporation acquires 100 laptop computers in 2015 for its account executives to use. Steem pays \$300,000 for the computers and bundled software. You are the newly hired CPA and you expect to advise Steem on tax issues regarding tax years 2016 and 2017. Upon examining the firm's records for 2015, you find that each computer was expensed and deducted in 2015. Later, when examining one of the computers, you notice it has several games loaded on the hard drive. Also, you find several items of personal correspondence saved in a subdirectory of the word-processing software package.
- What should you do? What are your obligations under the Statement on Standards for Tax Services?
  - Write a memorandum to your supervisor in the CPA firm explaining your observations and suggestions.

**The computers are capital assets of the corporation. Accordingly, they are subject to the rules for cost recovery. Apparently, the corporation expensed the total purchase of the computers. Expensing of operating assets is only permitted under the Section 179 election rules. Computers may qualify for Section 179 expensing. However, several limitations apply. Also, these computers may be subject to the listed property rules. Apparently, the usage of the computers contains elements of personal-use. Therefore, it is necessary to determine the extent of the personal use. If it is decided that some of the computers are used 50% or less for business matters, then the Section 179 election will not apply to those computers. Also, MACRS depreciation will not be allowed and ADS must be used to determine the depreciation expense for the business usage.**

**Not only is there a problem with the cost recovery of the computers, but the personal use of the computer may be considered gross income to the account executives. If the use is considered de minimis, then the personal use portion is not treated as gross income.**

**The CPA's responsibility under the Statement on Standards for Tax Services (SSTS) No. 6 is to inform Steem Corporation promptly of the errors concerning the cost recovery amounts in 2015. The CPA has no obligation to inform the IRS and cannot do so unless he has the client's permission. The error needs to be corrected before proceeding with the 2016 and 2017 tax returns, if the error continues to impact the accuracy of the current years' return.**

## Chapter 10

### Check Figures

- |   |   |
|---|---|
| <p>21. a. Not depreciable<br/>c. Depreciable<br/>e. Not depreciable<br/>g. Depreciable<br/>i. Not depreciable</p> | <p>b. Amortize<br/>d. Amortize<br/>f. Not depreciable<br/>h. Depreciable<br/>j. Business portion is depreciable</p> |
| <p>22. a. Repair<br/>c. Repair<br/>e. Repair (not deductible - personal)</p>                                      | <p>b. Repair<br/>d. Repair</p>  |
| <p>23. a. Capitalize<br/>c. Repair<br/>e. Repair</p>  | <p>b. Repair<br/>d. Repair</p>  |
| <p>24. a. Use Sec. 179 if business<br/>c. Sec. 179 flows through to owner</p>                                     | <p>b. Use Sec. 179<br/>d. Sec. 179 flows through to owner</p>   |
| <p>25. a. \$495,000<br/>c. \$1,510,000</p>  | <p>b. Lost forever</p>  |
| <p>26. a. \$482,000</p>   | <p>b. \$1,536,000</p>   |
| <p>27. a. \$12,000</p>  | <p>b. \$5,000</p>   |
| <p>28. a. \$26,000</p>  | <p>b. \$44,000</p>  |
| <p>29. a. \$55,000</p>  | <p>b. \$26,000 / \$35,000</p>   |
| <p>30. \$500,171</p>  |   |
| <p>31. a. \$8,000<br/>c. \$500</p>  | <p>b. \$320,000 - building<br/>d. \$700</p>   |
| <p>32. a. \$45,000<br/>c. \$13,000</p>  | <p>b. \$7,000<br/>d. \$25,000</p>   |
| <p>33. a. 18, 10, 18<br/>c. 3, 5, 5<br/>e. 10, 7, 10 or 10, 3, 10<br/>g. 10, 7, 10</p>                            | <p>b. 6, 5, 5<br/>d. 5, 5, 5<br/>f. 15, 7, 15 or 25, 20, 25<br/>h. 20, 15, 20</p>                                   |
| <p>34. a. 10, 7, 10<br/>c. 6, 5, 6<br/>e. None, 7, 12<br/>g. None, 3, 12</p>                                      | <p>b. 10, 7, 10<br/>d. 4, 5, 5<br/>f. None, 7, 12<br/>h. 6, 5, 6</p>  |

35. a. A10-2, 7, mid-year  
c. A10-2, 5, mid-year  
e. A10-2, 7, mid-year  
g. A10-2, 3, mid-year
- b. A10-2, 7, mid-year  
d. A10-2, 5, mid-year  
f. A10-2, 7, mid-year  
h. A10-2, 5, mid-year
36. a. A10-2, 5, mid-year  
c. A10-9, 39, mid-month  
e. A10-9, 39, mid-month
- b. A10-7, 27.5, mid-month  
d. A10-2, 5, mid-year  
f. A10-2, 20, mid-year
37. \$531,133
38. \$1,176 gain
39. \$2,765 adjusted basis
40. \$3,488 adjusted basis
41. a. \$523,516
- b. \$27,010
42. a. \$8,000
- b. \$8,572 or \$8,000
43. a. \$694,647
- b. Use ADS straight-line or MACRS
44. a. \$592,000  
c. \$764,309
- b. \$541,000; \$975,000
45. \$603,772
46. \$580,892
47. a. Mid-quarter convention required, \$87,550
- b. Elect to expense, \$570,200 cost recovery
48. a. \$6,262 gain
- b. \$367,800 loss
49. a. Year 1: \$508,200; \$45,065; \$54,100
- b. N/A
50. a. Year 1: \$510,003; \$28,500; \$40,698
- b. N/A
51. MACRS: Yr. 1 - \$14,290; Yr. 2 - \$24,490  
ADS: Yr. 1 - \$7,150; Yr. 2 - \$14,290
52. a. \$8,600
- b. \$6,955
53. a. \$12,570
- b. \$10,149
54. a. \$151,993  
c. \$104,500
- b. \$107,188
55. a. \$521,477  
c. \$270,538 gain
- b. \$2,505  
d. \$36,381 gain
56. \$2,107
57. \$2,370

- |     |  |                               |
|-----|--|-------------------------------|
| 58. | a. \$30,000; \$210,000<br>c. \$30,000  | b. \$35,000; \$205,000        |
| 59. | a. \$6,667<br>c. Use cost depletion; accept if need cash   | b. \$112,223 or \$97,500 gain |
| 60. | \$526,579 depreciation; \$4,440 amortization; \$3,305 patent   |                               |
| 61. | Equipment - \$30,000<br>Building - \$2,183<br>Goodwill - 4,000<br>Patent - \$667<br>Covenant - \$889 |                               |
| 62. | a. \$900   | b. \$3,300                    |