¶802.01 "BONUS" FIRST-YEAR DEPRECIATION

In an effort to jump-start a sluggish economy after the events of 9-11, Congress enacted first-year **bonus depreciation** for purchases of new personal property used for business or investment acquired after September 10, 2001 and placed in service by December 31, 2004. Taxpayers were required to deduct bonus depreciation for all eligible purchases unless they made an election not to take it. After deducting bonus depreciation from the cost of the property, taxpayers depreciated the remaining cost (known as "MACRS basis") using the MACRS rules presented in ¶802.02. For property placed in service between September 11, 2001 and May 5, 2003, the bonus percentage was 30% of the cost of the property. After May 5, 2003, the percentage increased to 50%.

More recently, Congress enacted bonus depreciation on purchases of new personal property placed in service for business or investment use from 2008–2019. Only new property purchased with a recovery period of 20 years or less (personal property) was eligible for bonus depreciation. The cost of new computer software was eligible as well. The bonus percentage rate remained at 50% from 2008-2017, with the exception of property placed in service from September 9, 2010 and December 31, 2011, when bonus percentage increased to 100% of the cost of the property. Bonus depreciation is claimed on Form 4562 (line 14).

EXAMPLE 1

On August 1, 2015, Victor paid $20,000 for new personal property to be used in his business. Victor deducts $10,000 ($20,000 × 50%) of bonus depreciation in 2015. He uses MACRS to depreciate the remaining $10,000, starting in 2015 using the rules described in ¶802.02–¶802.04.

EXAMPLE 2

Same facts as in Example 1, except that Victor purchases used personal property in 2015. Victor does not deduct bonus depreciation in 2015 because bonus depreciation can only be taken on purchases of new personal property.

Since originally enacted in 2001, bonus depreciation has been allowed to expire a number of times, only to be retroactively reinstated. The last time this happened was at the end of 2014. In late 2015, Congress passed a tax law that retroactively extends bonus depreciation through 2019, with the 50% bonus depreciation rate applying to purchases of new personal property acquired from 2015-2017. The rate for bonus depreciation on eligible purchases made during 2018 will be 40%. It will be 30% for eligible purchases made during 2019.

¶802.02 MODIFIED ACCELERATED COST RECOVERY SYSTEM (MACRS)

To calculate depreciation expense using MACRS, taxpayers multiply the MACRS basis of the property by a percentage taken from an IRS-provided table. Under MACRS, personal property is assigned a life of 3, 5, 7, 10, or 15 years, regardless of its actual useful life. MACRS assigns the more common properties a 5-year or 7-year life. The 5-year-life class includes vehicles, office equipment, and cell phones. Office equipment includes copiers, fax machines, computers, printers, and the like. The 7-year-life class includes furniture and fixtures, machinery, and equipment other than office equipment.

MACRS uses the 200% declining balance method to recover the costs of 3-, 5-, 7-, and 10-year property. The 150% declining balance method is used for 15-year property. MACRS switches to the straight-line method when straight-line depreciation yields a greater deduction.

MACRS ignores salvage value. Instead, taxpayers multiply the percentage from the table by the property's MACRS basis to compute their MACRS deduction. Computing MACRS basis begins with the unadjusted basis in the property, which is the taxpayer's total cost of the property for use at its operating location. It includes the purchase price, sales tax, plus any delivery and installation costs. Any Section 179 expense or bonus depreciation taken in the first year is subtracted from the unadjusted basis to compute the taxpayer's MACRS basis.

The unadjusted basis of nonbusiness property that a taxpayer converts to business or investment use equals the *lesser of* (i) the taxpayer's adjusted basis in the property, or (ii) its fair market value (FMV) on the conversion date. Special rules also apply to property acquired by exchange, gift, or inheritance. These rules are discussed in Chapter 10.

¶802.03 AVERAGING CONVENTIONS

Two averaging conventions determine the date on which taxpayers can begin depreciating personal property. These two conventions are the half-year convention and the mid-quarter convention. The half-year convention applies when at least 60% of the basis of personal property placed in service during the year is placed in service during the first nine months of the year. The mid-quarter convention applies when more than 40% of the basis of personal property placed in service during the year is placed in service during the last three months of the year.

Half-Year Convention

When at least 60% of all personal property placed in service during the year is placed in service during the first nine months of the year, all personal property placed in service during that year is depreciated using the half-year convention. When using the half-year convention, the actual date on which personal property is placed in service is ignored. Instead, the **half-year convention** assumes that taxpayers place personal property in service halfway through the tax year. The half-year convention also assumes that taxpayers dispose of (e.g., sell) property halfway through the tax year. Thus, under the half-year convention, taxpayers get one-half year's depreciation in the first and last years, regardless of how long the taxpayer actually owned the property in those years.

Figure 8-1 shows the MACRS percentages for 5- and 7-year classes under the half-year convention. To compute MACRS on property depreciated under the half-year convention, taxpayers multiply these percentages by the MACRS basis of the property (as described in ¶802.02).

Figure 8-1: MACRS Table for 5- and 7-Year Classes Using the Half-Year Convention

	Recovery Period	
Year	5-Year	7-Year
1	20.00%	14.29%
2	32.00	24.49
3	19.20	17.49
4	11.52*	12.49
5	11.52	8.93*
6	5.76	8.92
7		8.93
8		4.46

*Switching to straight-line results in the maximum depreciation deduction

EXAMPLE 11

Natalie places in service a desk. To recover the cost of the desk and all other 7-year property placed in service during the year, Natalie can choose from the following methods:

MACRS:
- 200% declining balance over 7 years (regular MACRS)
- Straight-line over 7 years (straight-line MACRS)

ADS:
- Straight-line over 10 years
- 150% declining balance over 10 years

No matter which method Natalie selects, the percentage of all personal property placed in service in the fourth quarter will determine whether the half-year or mid-quarter convention applies. Also, the method Natalie selects will apply to all 7-year property placed in service during the year. Regardless of which depreciation method Natalie selects, she must continue to depreciate the desk (plus all other 7-year property placed in service during the year) using that method in all future years.

It is often assumed that the taxpayer should take the maximum deduction allowed at the earliest possible time. However, a taxpayer currently in a low tax bracket may expect to be in a higher tax bracket in future years. This particular taxpayer may benefit more by delaying depreciation deductions until the higher tax bracket years. This can be accomplished by electing straight-line MACRS or ADS to depreciate property.

¶802.05 SECTION 179 EXPENSE ELECTION

Taxpayers that qualify can elect to take an up-front deduction in the year certain personal property is placed in service. Taxpayers can expense up to $500,000 of Section 179 property placed in service during 2015. The Internal Revenue Code (Code) defines **Section 179 property** as *tangible personal property purchased* by the taxpayer and *used in a trade or business*. Thus, real property and property acquired by means other than a purchase are not Section 179 property. Likewise, depreciable personal property used for investment is not Section 179 property. However, used property that the taxpayer purchases for use in the taxpayer's business is eligible for Section 179 expensing.

The amount of Section 179 property that taxpayers can expense in the first year is reduced dollar-for-dollar when more than $2 million of Section 179 property is placed in service during 2015. For example, taxpayers who place in service $2,150,000 of Section 179 property during 2015 would be allowed to expense up to $350,000 [$500,000 – ($2,150,000 – $2,000,000)] of the Section 179 property in that year. Married couples who file married filing separately can each claim one-half of the couples' allowed Section 179 amount, or they can agree to split the allowed amount in any other manner. Taxpayers compute the maximum Section 179 expense they can take each year on Form 4562, Part I (lines 1 to 5).

Taxpayers can elect Section 179 expense only in the year they place the property in service. Once taxpayers determine the amount of Section 179 expense they wish to elect, they allocate it amongst one or more of the Section 179 properties placed in service during the year. Taxpayers must identify on the tax return the property (or properties) they elect to expense under Section 179. Taxpayers make this election on Form 4562, Part I (line 6). After selecting the property (or properties) to expense under Section 179, they can recover the rest of the unadjusted basis of the property (or properties) using bonus depreciation (when allowed), MACRS (regular or straight-line), or ADS (straight-line or 150% declining balance).

EXAMPLE 12

On February 10, 2015, Lowe Enterprises placed in service used personal property that costs $2,479,000, which includes $80,000 of used equipment (7-year property). The half-year convention applies to personal property placed in service during 2015. Lowe elects to expense part of the equipment under Section 179. Since Lowe placed in service more than $2 million of Section 179 property, it can elect to expense up to $21,000 under Section 179 [$500,000 – ($2,479,000 – $2,000,000)]. Lowe can then deduct regular MACRS on the remaining $59,000 ($80,000 – $21,000) (Bonus depreciation is not allowed on used property). In 2015, total depreciation on the equipment equals $29,431 [$21,000 Section 179 expense + $8,431 MACRS ($59,000 × 14.29%)].

Section 179 expense cannot exceed a taxpayer's taxable income from any trade or business after all other depreciation has been taken. Taxpayers can carry over to the next tax year any Section 179 expense disallowed because of the taxable income limit. However, this carryover is subject to the Section 179 limit that applies to the next year(s). For purposes of MACRS, taxpayers must reduce the basis in the property by the total amount they *elect* to expense under Section 179.

EXAMPLE 13

Same facts as in Example 12, except that Lowe's taxable income from the business (after regular depreciation) is $5,000. Although Lowe can elect up to $21,000 of Section 179 expense, only $5,000 can be deducted in 2015. The $16,000 of disallowed expense can be carried over to 2016 and later years.

For purposes of computing MACRS on the equipment, Lowe reduces its basis by the amount it elects to expense under Section 179, even though part of the expense must be postponed. If Lowe does not do this, over the next eight years Lowe will deduct $21,000 under Section 179 ($5,000 in 2015 and $16,000 in a future year) and $75,000 ($80,000 – $5,000) as MACRS depreciation. The total deductions of $96,000 would exceed the $80,000 cost of the equipment.

¶802.06 FILLED-IN FORM 4562, PART I

INFORMATION FOR FIGURE 8-3:

Lowe Enterprises from Example 13 computes the maximum amount it can elect to expense under Section 179. Lowe enters the amounts shown below in bold on Form 4562 and then follows the instructions on the form to determine that $5,000 of Section 179 expense that can be deducted in the current year and $16,000 must be carried over to next year.

Line #

1: Maximum amount, **$500,000**
2: Total cost of section 179 property placed in service, **$2,479,000**
3: Threshold cost of section 179 property before reduction in limitation, **$2,000,000**
4: Reduction in limitation, **$479,000** ($2,479,000 – $2,000,000)
5: Dollar limit (maximum Section 179 that can be elected), **$21,000** ($25,000 – $4,000)
6(a): Description of property, **Equipment**
6(b): Cost (business use only), **$80,000**
6(c): Elected cost (to be expensed under Section 179), **$21,000**
11: Smaller of business income ($5,000) or line 5 ($21,000), **$5,000**

Figure 8-3: Filled-In Form 4562, Part I

Form **4562** | **Depreciation and Amortization** | OMB No. 1545-0172

(Including Information on Listed Property)

▶ Attach to your tax return.

Department of the Treasury Internal Revenue Service (99) | ▶ Information about Form 4562 and its separate instructions is at *www.irs.gov/form4562.* | **2015** Attachment Sequence No. **179**

Name(s) shown on return	Business or activity to which this form relates	Identifying number
Lowe Enterprises	Retail Sales	71-6928490

Part I Election To Expense Certain Property Under Section 179

Note: If you have any listed property, complete Part V before you complete Part I.

1	Maximum amount (see instructions)	1	500,000
2	Total cost of section 179 property placed in service (see instructions)	2	2,479,000
3	Threshold cost of section 179 property before reduction in limitation (see instructions)	3	2,000,000
4	Reduction in limitation. Subtract line 3 from line 2. If zero or less, enter -0-	4	479,000
5	Dollar limitation for tax year. Subtract line 4 from line 1. If zero or less, enter -0-. If married filing separately, see instructions	5	21,000

6	(a) Description of property	(b) Cost (business use only)	(c) Elected cost
	Equipment	80,000	21,000
7	Listed property. Enter the amount from line 29	7	

8	Total elected cost of section 179 property. Add amounts in column (c), lines 6 and 7	8	21,000
9	Tentative deduction. Enter the **smaller** of line 5 or line 8	9	21,000
10	Carryover of disallowed deduction from line 13 of your 2014 Form 4562	10	
11	Business income limitation. Enter the smaller of business income (not less than zero) or line 5 (see instructions)	11	5,000
12	Section 179 expense deduction. Add lines 9 and 10, but do not enter more than line 11	12	5,000
13	Carryover of disallowed deduction to 2016. Add lines 9 and 10, less line 12 ▶	13	16,000

Section 179 expense was first introduced in 1986. The maximum amount that could be immediately expensed that year was $5,000. From 1987-2002, Congress gradually increased the amount that could be expensed. Then, in 2003, Congress significantly increased the amount of the deduction and placed in service limits to give businesses an extra incentive to spend more on new equipment and other new tangible personal property. The hope was that this could provide a boost to the economy (see discussion of tax incentives at ¶101). From 2011-2014, these amounts were at their highest ($500,000 and $2 million, respectively). However, when Congress initially failed to extend the higher limits for 2015, the amounts reverted back to their 2002 levels. In December 2015, Congress passed tax legislation that retroactively and permanently extended the higher $500,000 and $2 million amounts. Moreover, starting in 2016, these amounts will be indexed annually for inflation (see discussion at ¶202).

¶802.07 LISTED PROPERTY LIMITATIONS

Special rules apply to property *suitable for personal use.* Such property, referred to as **listed property,** commonly includes vehicles, computers, and printers. Listed property that the taxpayer does not use more than 50% of the time for business does not qualify for regular (accelerated) MACRS, bonus depreciation, or Section 179 first-year expense. Instead, such property must be depreciated under ADS using the straight-line method. The half-year and mid-quarter provisions apply to listed property.

Figure 8-4: Filled-In Form 4562, Part V

Form 4562 (2015) Page **2**

Part V **Listed Property** (Include automobiles, certain other vehicles, certain aircraft, certain computers, and property used for entertainment, recreation, or amusement.)

Note: For any vehicle for which you are using the standard mileage rate or deducting lease expense, complete **only** 24a, 24b, columns (a) through (c) of Section A, all of Section B, and Section C if applicable.

Section A—Depreciation and Other Information (Caution: See the instructions for limits for passenger automobiles.**)**

24a Do you have evidence to support the business/investment use claimed? ☑ **Yes** ☐ **No** **24b** If "Yes," is the evidence written? ☑ **Yes** ☐ **No**

(a) Type of property (list vehicles first)	**(b)** Date placed in service	**(c)** Business/ investment use percentage	**(d)** Cost or other basis	**(e)** Basis for depreciation (business/investment use only)	**(f)** Recovery period	**(g)** Method/ Convention	**(h)** Depreciation deduction	**(i)** Elected section 179 cost
25 Special depreciation allowance for qualified listed property placed in service during the tax year and used more than 50% in a qualified business use (see instructions) .						**25**		
26 Property used more than 50% in a qualified business use:								
		%						
		%						
		%						
27 Property used 50% or less in a qualified business use:								
Computer	**8-9-14**	**55** %	**4,000**	**2,200**	**5 yr.**	S/L – **HY**	**440**	
		%				S/L –		
		%				S/L –		
28 Add amounts in column (h), lines 25 through 27. Enter here and on line 21, page 1 .						**28**	**440**	
29 Add amounts in column (i), line 26. Enter here and on line 7, page 1							**29**	

¶802.09 LUXURY AUTOMOBILE LIMITS

The tax laws limit the depreciation of vehicles used for business, even those used 100% for business. These limits apply to all types of depreciation, including Section 179 expenses and bonus depreciation. Figure 8-5 shows the depreciation limits for cars (other than trucks or vans) placed in service from 2008–2015. Slightly higher limits apply to trucks and vans.

Figure 8-5: Luxury Car Depreciation Limits for the Years 2008–2015

	Placed in Service During		
Year	**2008 or 2009**	**2010 or 2011**	**2012–2015**
1	\$2,960/\$10,960*	\$3,060/\$11,060*	\$3,160/\$11,160*
2	4,800	4,900	5,100
3	2,850	2,950	3,050
4	1,775	1,775	1,875

* For 2008 and 2009, the limit for used cars and cars used 50% or less for business was \$2,960. For 2010 and 2011, this amount was \$3,060. For 2012–2015, it was \$3,160. The higher amounts for these years represent the limits for new cars used more than 50% for business (due to bonus depreciation allowed in those years).

The limits in Figure 8-5 apply only to passenger automobiles. A passenger automobile is any four-wheeled vehicle made primarily for use on public streets, roads, and highways and whose unloaded gross vehicle weight is 6,000 pounds or less. Ambulances, hearses, taxis, and limousines are not subject to the luxury automobile rules. Neither are trucks and vans placed in service after July 6, 2003, if they have been modified so that they are not likely to be used for personal use.

Updated to reflect the passage of the PATH Act of 2015

When the luxury automobile rules were first enacted, the rules applied to "passenger automobiles" that did not weigh over 6,000 pounds. Since then, many sports utility vehicles (SUVs) weigh over 6,000 pounds, and taxpayers found they could avoid the luxury automobile limits by purchasing these heavier SUVs and using them in their businesses. This allowed them to expense the SUV's cost under Section 179 (assuming 100% business use).

Congress addressed this issue by enacting tax rules that now limit the amount of Section 179 expense allowed on SUVs weighing between 6,000 and 14,000 pounds to a maximum of $25,000 (based on 100% business use). Amounts not expensed under Section 179 are depreciated using the MACRS rules discussed in this chapter. Under current tax law, only SUVs weighing more than 14,000 pounds are exempt from the $25,000 Section 179 limit.

The luxury automobile limits, like those shown for cars in Figure 8-5, are the limits imposed for vehicles used 100% of the time for business. Taxpayers must reduce the limits when the vehicle is used less than 100% for business. For vehicles used partially for business, taxpayers must combine the rules for listed property with those for luxury automobiles.

EXAMPLE 17

On August 2, 2013, Paula placed in service a new car that cost $40,000. The half-year convention applies to personal property Paula placed in service in 2013. Paula uses the car 70% of the time for business. Thus, her business-use cost of the car is $28,000 ($40,000 × 70%). Since business use exceeds 50%, bonus depreciation and regular MACRS were taken on the car. Paula uses the "2012–2014" column from Figure 8-5 to compute her luxury car limits. In 2013, Paula deducted $7,812 [the *lesser of* (i) $16,800 (($28,000 business-use cost × 50% bonus depreciation rate) + ($14,000 MACRS basis × 20%)) or (ii) $7,812 ($11,160 × 70%)]. In 2015 (year 3), she deducts $2,135 [the *lesser of* (i) $2,688 ($14,000 MACRS basis × 19.2%) or (ii) $2,135 ($3,050 × 70%)].

EXAMPLE 18

On July 15, 2011, Anne placed in service a used car that cost $30,000. The half-year convention applies to personal property Anne placed in service in 2011. Anne uses the car 80% of the time for business. She uses the "2010 or 2011" column from Figure 8-5 to compute her luxury car limits. Anne was limited to $2,448 ($3,060 × 80%) of depreciation in 2011, since it is less than $4,800 ($30,000 × 80% × 20% MACRS). (Bonus depreciation was not taken in 2011, since Anne purchased a used car.) In 2015 (year 5), Anne's depreciation deduction is limited to $1,420 [*lesser of* (i) $2,765 ($30,000 × 80% × 11.52%) or (ii) $1,420 ($1,775 × 80%)].

EXAMPLE 19

On April 5, 2015, Phil placed in service a used car costing $45,000. Phil uses the car 100% for business. He elects to use straight-line ADS to depreciate the car. The half-year convention applies to all personal property placed in service during 2015. Phil computes his first year ADS depreciation on the car to be $4,500 ($45,000 × 1/5 × ½). However, this amount exceeds the $3,160 first year limit for cars placed in service during 2015. (Bonus depreciation does not apply to used property.) Thus, Phil's deduction is limited to $3,160. In 2016, ADS depreciation would be $9,000 ($45,000 × 1/5). However, this amount exceeds the $5,100 year 2 limit for cars placed in service during 2015. Thus, Phil's 2016 depreciation deduction will be limited to $5,100.

Leased Vehicles

Taxpayers leasing cars and other vehicles can either use the standard mileage rate or deduct the business portion of their lease payments. To prevent taxpayers from getting around the luxury automobile limits by leasing (rather than buying) expensive cars, the government reduces the amount taxpayers can deduct for their lease payments. They do this by reducing the taxpayer's car expense deduction by an "inclusion amount." The inclusion amount is based on the FMV of the vehicle. Taxpayers multiply the inclusion amount from the IRS table by the business-use percentage. In the first and last years of the lease, the amount is further reduced to reflect the portion of the year the car was leased.

The inclusion amounts for leased cars can be found in IRS Publication 463. Figure 8-6 shows the portion of the table for cars with a FMV between $35,000 and $40,000 that were first leased during 2015. Inclusion amounts for trucks and vans are slightly lower. These amounts, along with inclusion amounts for car values not listed in Figure 8-6, can be found in IRS Publication 463, Appendix A.

Figure 8-6: Inclusion Amounts for Cars First Leased in 2015

Fair Market Value		Tax Year of Lease				
Over	Not Over	1st	2nd	3rd	4th	5th and later
$35,000	$36,000	$28	$62	$92	$110	$126
36,000	37,000	30	65	96	116	133
37,000	38,000	31	68	102	121	139
38,000	39,000	33	71	106	127	146
39,000	40,000	34	75	110	132	153

EXAMPLE 20

On September 1, 2015, Lane began leasing a car for $400 a month. Lane leased the car for 122 days during 2015 (September 1 to December 31). The FMV of the car was $37,200 and Lane's business usage is 70%. In 2015, Lane's initial deduction equals 70% of her lease payments, or $1,120 ($400 × 4 × 70%). From Figure 8-6, the inclusion amount for 2015 (1st year of the lease) for a car valued at $37,200, is $31. Lane reduces her 2015 lease expense deduction by $7 ($31 × 70% × 122/365) and deducts $1,113 ($1,120 – $7) on Schedule C (line 20a). In 2016, Lane's lease expense deduction is $3,312 [$3,360 for her lease payments ($400 × 12 × 70%) – $48 ($68 inclusion amount × 70%)]

EXAMPLE 21

On March 2, 2015, Michelle entered into a 36-month lease. The FMV of the car she leased is $39,430. Michelle drives the car 75% for business each year. To compute her inclusion amount in 2015, Michelle multiplies the $34 first year inclusion amount from Figure 8-6 by 75% and then by 305/365 (the portion of 2015 that she leased the car). For 2016 and 2017, she multiplies the $75 and $110 inclusion amounts by 75% to compute her inclusion amount in those years. In 2018 (the last year of the lease), Michelle multiplies the $132 fourth year inclusion amount by both 75% and 60/365 (the portion of the fourth year that she leased the car during 2018).

¶803 Depreciation of Real Property

¶803.01 MODIFIED ACRS (MACRS)

Under MACRS, taxpayers depreciate real property using the straight-line method. The recovery period for real property under MACRS depends on whether the property is residential or nonresidential real property. Taxpayers recover the cost of residential rental property over 27.5 years. Real property is residential rental realty if the building is used as a place where people live. Examples of residential realty include apartment buildings and rental vacation homes. The recovery period for nonresidential (commercial and industrial) real estate, such as office buildings, manufacturing plants, and warehouses, is 31.5 years if placed in service before May 13, 1993. For nonresidential property placed in service after May 12, 1993, the recovery period is 39 years. Although land is real property, it is not depreciated.

¶804 Filled-In Form 4562

INFORMATION FOR FIGURE 8-9:

Figure 7-3 in Chapter 7 (¶705.06), the income statement from Harold's Hardware Store gave an amount of $1,133 for depreciation expense. Figure 8-8 shows how Harold's depreciation expense was computed. The amounts in the third column are the cost (for 2015 purchases) or MACRS basis (for pre-2015 purchases) of the property. The half-year convention applies to all personal property. Harold has written evidence to support the business use of the computer. The tools purchased in 2015 are used property. All other properties were purchased new.

Figure 8-8: Depreciation for Harold's Hardware Store

Property	Date Acquired	Cost or MACRS Basis	Recovery Period	% or Method	Depreciation in 2015
Computer (80% business)	8-01-13	$ 480[1]	5	200% DB	92[2]
Paint mixer	3-01-13	1,930	7	200% DB	338[3]
Tool cabinet	3-14-13	1,865	7	200% DB	326[4]
Tools	7-16-15	454	7	200% DB	65[5]
Table saw	1-15-09	216	12*	ADS/SL	18
Jointer/planer	6-29-09	316	12*	ADS/SL	26
Storage shed	12-06-09	10,450	39	SL	268
Total cost recovery					$1,133

*Since no designated class life applies to the equipment, the recovery period is 12 years.
[1] $600 (cost minus 50% bonus depreciation taken in 2013) × 80% = $480 MACRS basis
[2] $480 MACRS basis × 19.2% (year 3 percentage)
[3] $1,930 MACRS basis (after 50% bonus depreciation taken in 2013) × 17.49% (year 3 percentage)
[4] $1,865 MACRS basis (after 50% bonus depreciation taken in 2013) × 17.49% (year 3 percentage)
[5] $454 × 14.29% year 1 percentage. No bonus depreciation is allowed on used property.

Because computers are listed property, the depreciation deduction is first recorded in Part V, and then is entered on Part IV (line 21). See Figure 8-9.

Line #
26(a): Type of property used more than 50% for business, **Computer**
26(b): Date placed in service, **8-01-13**
26(c): Business/investment use percentage, **80%**
26(d): Cost or other basis, **$600** (cost minus 50% bonus depreciation)
26(e): Basis for depreciation, **$480** ($600 × 80%)
26(f): Recovery period, **5 yr.**
26(g): Method/convention, **DDB/HY** (double declining balance method; half-year convention)
26(h): Depreciation deduction, **$92** ($480 × 19.2% year 3 percentage from the 5-year column in Figure 8-1)
17: MACRS on pre-2015 assets (includes regular and straight-line MACRS, as well as ADS), **$976** (paint mixer, $338 + tool cabinet, $326 + table saw, $18 + jointer/planer, $26 + storage shed, $268)
19c(c): Basis for depreciation, **$454**
19c(d): Recovery period, **7 yr.**
19c(e): Convention, **HY** (half-year)
19c(f): Method, **DDB** (double declining balance)
19c(g): Depreciation deduction, **$65** ($454 × 14.29% year 1 percentage from the 7-year column in Figure 8-1)

8

Name:
Section:
Date:

QUESTIONS AND PROBLEMS

1. **MACRS Recovery Periods.** (Obj. 1) For each of the following types of properties, state the MACRS recovery period, depreciation method, and averaging convention(s) that are used to depreciate the property under regular MACRS.

	Recovery Period	*Depreciation Method*	*Averaging Convention*
Automobiles	________	________	________
Light trucks	________	________	________
Computers	________	________	________
Furniture and fixtures	________	________	________
Machinery and equipment	________	________	________
Commercial buildings	________	________	________
Residential buildings	________	________	________

2. **Mid-Quarter vs. Half-Year Convention.** (Obj. 1) A calendar-year taxpayer acquired four new machines in 2015 on the dates shown below. Section 179 is not elected, but regular MACRS is used to depreciate the machines.

February 1	$50,000
April 1	70,000
October 1	60,000
December 1	80,000

a. Compute total depreciation expense for 2015 that would be reported on Schedule C, using the appropriate averaging convention.

b. Same as in Part a., except that the third machine was acquired on September 30 (instead of October 1). Comment on the significance of the difference between this amount and your answer to Part a.

3. **MACRS.** (Obj. 1) Florence placed in service the following properties during 2015. Compute Florence's total depreciation expense for 2015 and 2016, assuming that she does not elect Section 179 expensing, but does take bonus depreciation, when applicable. The machine, equipment, and furniture were all purchased new.

Type of Property	*Cost*	*Date Placed in Service*
Machine	$130,000	March 3, 2015
Equipment	110,000	June 8, 2015
Furniture	48,000	August 15, 2015
Office building	200,000	October 4, 2015

4. **MACRS, Year of Sale.** (Obj. 1) Bradford Company sold the following properties. Compute the allowable depreciation deduction for 2015 for each property.

Property	*Date Acquired*	*MACRS Basis**	*Depreciation Method*	*Averaging Convention*	*Date of Sale*
Computer	7-1-13	$ 4,200	DDB	HY	9-5-15
Automobile	4-1-12	12,000	DDB	MQ	3-1-15
Furniture	7-10-10	24,000	DDB	MQ	7-1-15

**After subtracting bonus depreciation from the original cost*

5. **MACRS, Year of Sale.** (Obj. 1) Judson Company sold the following properties. Compute the allowable depreciation deduction for 2015 for each property.

Property	*Date Acquired*	*MACRS Basis**	*Depreciation Method*	*Averaging Convention*	*Date of Sale*
Machine	6-1-10	$44,000	DDB	MQ	12-9-15
Furniture	8-8-14	12,000	DDB	HY	3-21-15
Computer	1-6-13	24,000	DDB	MQ	9-30-15

**After subtracting bonus depreciation from the original cost*

8. **Section 179.** (Obj. 2) Sand Corporation purchases one asset in 2015—used machinery costing $2,300,000. The machine was placed in service on June 2, 2015. Sand wants to elect the maximum Section 179 possible, even if some must be carried over to 2016. Sand's 2015 taxable income before Section 179 expense (but after all other expenses, including depreciation) is $167,000.

   a. Compute the maximum Section 179 Sand can elect in 2015 and the Section 179 carryover to 2016.

   b. Compute the maximum total depreciation on the machine for 2015.

9. **Section 179.** (Obj. 2) In May 2015, Riddick Enterprises placed in service new 7-year property costing $512,000 and new 5-year property costing $512,000. These are the only two properties Riddick placed in service during the year. Riddick's taxable income before deducting Section 179 expense (but after all other expenses, including depreciation expense) is $1,000,000.

   a. Compute Riddick's total depreciation expense deduction assuming Riddick uses regular MACRS and elects to take the maximum Section 179 expense on the 5-year property.

   b. Compute Riddick's total depreciation expense deduction assuming Riddick uses regular MACRS and elects to take the maximum Section 179 expense on the 7-year property.

   c. Which choice results in the largest total depreciation deduction? Comment on your answers to Parts a. and b.

10. **MACRS, Section 179.** (Objs. 1 and 2) The Redwood Company, a calendar-year corporation, acquired the following new properties.

Item	*Cost*	*Date Acquired*
Copier	$ 28,000	March 1, 2015
Furniture	84,000	June 1, 2015
Equipment	540,000	June 30, 2015
Warehouse	110,250	July 9, 2015

a. Compute the maximum depreciation deduction that Redwood can take in 2015 and 2016 on each of these properties assuming Section 179 is not elected.

b. Assume that Redwood elects to take the maximum allowed Section 179 expense on the equipment acquired on June 30, 2015. The company uses regular MACRS to depreciate the rest of the cost. Redwood's taxable income before Section 179 expense (but after all other expenses, including depreciation) is $950,000. Compute the maximum total depreciation deduction for the equipment for 2015 and 2016.

11. **Listed Property, Section 179.** (Objs. 2 and 3) Terrell is a self-employed personal financial adviser. In March 2015, Terrell purchased a computer for $2,800. This was his only purchase of depreciable property in 2015. He uses the computer 60% of the time in providing financial advice to clients, 15% of the time managing his own investments, and the rest of the time for personal use.

a. Compute Terrell's maximum depreciation expense deduction in 2015 for the computer assuming he does not elect Section 179 in 2015.

b. Same as in Part a., except that Terrell elects the maximum Section 179 expense.

c. Where on his tax return does Terrell deduct this depreciation expense?

12. **Listed Property.** (Obj. 3) During 2015, Simon (self-employed) pays $14,500 for a new car that he uses 45% of the time for business, 25% of the time for investment purposes, and 30% of the time for personal use. The half-year convention applies to the car. How much depreciation is Simon entitled to deduct in 2015?

13. **Luxury Automobiles.** (Obj. 3) Charlotte purchased a new car on March 1, 2010, for $40,000 and uses it 80% of the time for business purposes. Prepare a schedule that shows the maximum depreciation she will be entitled to take in each of the years 2010 through 2015, assuming that she uses the automobile 80% of the time for business each year.

14. **Luxury Automobiles.** (Obj. 3) On September 13, 2015, Debi places in service a new car costing $25,000 (her only acquisition during the year). She uses the car 90% of the time for business. Compute Debi's maximum depreciation expense for 2015.

15. **Leased Vehicles.** (Obj. 3) On March 1, 2015, Casey enters into a 36-month lease for a car valued at $36,400. Her monthly lease payment is $470, and she uses the car 75% for business. What amount will Casey deduct in 2015 and 2016?

16. **Leased Vehicles.** (Obj. 3) Bart operates his business as a sole proprietorship. On October 1, 2015, Bart enters into a 24-month lease on a car valued at $39,900. His monthly payments are $800. Bart uses the car 85% for business each year. Compute Bart's lease deduction and inclusion amounts for 2015–2017.

17. **MACRS and Averaging Conventions.** (Obj. 1) Jan purchased the following properties during 2015.

Description	*Date Placed in Service*	*Cost*
New Computer	March 9, 2015	$ 6,000
Used Machinery	July 17, 2015	70,000
Used Office building	September 6, 2015	270,000
New Equipment	December 27, 2015	84,000

Compute Jan's depreciation for each of these properties for 2015 and 2016 using the maximum depreciation allowed without taking Section 179.