

Answers to Selected PAK Questions Unit11.
PAK Chapter 10. Depreciation, Cost Recovery, Depletion and Amortization

Discussion Questions

I:0-1 The basis of property converted from personal-use to business or investment use is the lesser of the adjusted basis or the FMV of the property (at the date of conversion). The decline in value of \$20,000 (\$120,000 - \$100,000) represents a nondeductible personal loss and is not depreciable. Therefore, the depreciable basis is \$100,000 of which a portion must be allocated to land. This lower of cost or market rule is intended to prevent taxpayers from depreciating unrealized nondeductible personal losses. pp. I:10-3 and I:10-4.

<u>Subject to MACRS Depreciation</u>	<u>Subject to Sec. 197 Amortization</u>	<u>b. Recovery Period</u>
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I:10-6 a. Neither machine was placed in service in the fourth quarter, so the half-year convention (Table 1) applies. Depreciation on Machine C would be \$21,435 ($\$150,000 \times 0.1429$), and depreciation on Machine D would be \$10,000 ($\$50,000 \times 0.20$).

b. If Roberta elects Sec. 179, she can expense up to \$250,000 in 2009. She can choose the assets on which she takes the Sec. 179 deduction. To maximize the depreciation deduction, assets with longer recovery lives generally should be selected first. So, Roberta can elect to expense \$250,000 of Machine C. Thus, total depreciation for 2009 would be \$262,858 [$\$250,000 + (\$20,000 \times 0.1429) + (\$50,000 \times 0.20)$]. pp. I:10-5 through I:10-7.

I:0-8 a. No. The salesman is incorrect. The maximum amount of depreciation, (Sec. 179 and regular MACRS) is limited to \$2,960 in 2009 due to the Section 280F luxury auto limits. If Sec. 179 is not elected, the total depreciation deduction of \$27,000 would be greater than the maximum luxury car amount of \$10,960 (with bonus depreciation). Thus, the maximum depreciation deduction in the initial year is substantially less than claimed by the salesperson. As one may observe, Sec. 179 is not recommended for luxury automobiles.

b. The maximum depreciation deduction under Sec. 280F in the first year would be \$1,776 ($\$2,960$ limit $\times 0.60$ business) without bonus depreciation and \$6,576 ($\$10,960 \times 0.60$) with bonus depreciation.

c. Jose could deduct the lease payments. However, he must reduce the deduction by a lease inclusion amount from tables published by the IRS. See Tables 13 and 14 of Appendix C. Jose is not eligible for the Sec. 179 deduction.

d. The salesman's claims are a bit more correct in this case, but still overstated. Since the SUV has a GVWR of greater than 6,000 pounds, the ceiling limitations do not apply. However, the Sec. 179 deduction is limited to \$25,000. So, in this case, Jose may claim a Sec. 179 deduction of \$25,000, bonus depreciation of \$10,000 [$(\$45,000 - \$25,000) \times 0.50$], and a regular MACRS deduction of \$2,000 [$(\$45,000 - \$25,000 - \$10,000) \times 0.20$], for a total of \$37,000 in 2009. While the 2004 Jobs Act reduced the Sec. 179 deduction to a maximum of \$25,000, SUVs may still claim depreciation deductions far in excess of passenger automobiles that are subject to the ceiling limitation. pp. I:10-13 through I:10-16.

I:0-12 a. The taxpayer may use MACRS for the business-use portion of the cost of both assets. Thus, he is entitled to claim depreciation on \$25,600 of the auto's cost ($\$32,000 \times 0.80$) and \$4,000 of

the computer's cost. Both have a recovery period of five years. However, the maximum depreciation that may be deducted in 2009 on the auto is limited to \$2,368 ($\$2,960 \times 0.80$) under the so-called "luxury car rules." If the taxpayer claims bonus depreciation in 2009, the limit increases to \$8,768 ($\$10,960 \times 0.80$).

b. If the taxpayer is an employee and the auto and computer are not required as a condition of employment, no depreciation is allowed.

c. If the business use percentage decreases to 50% or less in a subsequent year, the property is subject to depreciation recapture and the depreciation for all subsequent years is recomputed using the ADS. When the business use first falls to 50% or below, depreciation must be recaptured to the extent that MACRS depreciation exceeds the recomputed depreciation using the ADS. pp. I:10-12 through I:10-14.

I:10-20 a. Assuming Simon wants to maximize his deductions in the initial year, he would elect expensing, because the total deduction is \$25,000 (\$15,000 percentage depletion + \$10,000 IDC) if the IDC is expensed, but only \$20,000 if the IDC is capitalized.

b. Intangible drilling costs (IDCs) are generally expensed because of the greater current tax benefit over capitalizing and deducting the costs in future periods. If percentage depletion is expected to be greater than cost depletion, it is more beneficial to deduct the IDCs. The capitalization and amortization of IDC merely increases the cost depletion amount and produces limited or no tax benefit. Expensing IDCs reduces gross income, thereby lowering taxable income. pp. I:10-23 and I:10-24.

Problems

I:10-28 a. Large Corporation can depreciate only the truck, machinery, and building in 2009. The 40% test was used to determine which convention (half-year or mid-quarter) applied for MACRS depreciation of the truck and the machinery. The 40% test showed that both assets use mid-quarter depreciation, because more than 40% of all tangible personal property placed in service in 2009 was placed in service in the last three months ($\$85,000 \div \$121,000 = 70.2\%$). Total depreciation in 2009 is \$15,935, computed as follows:

Truck ($\$36,000 \times 0.35$ (Table 2, Year 1))	\$12,600
Machinery ($\$85,000 \times 0.0357$ (Table 5, Year 1))	3,035
Building ($\$280,000 \times 0.00107$ (Table 9, Year 2, 12 th month))	<u>300</u>
Total 2009 depreciation	<u>\$15,935</u>

b. Because the MACRS table percentages are full-year percentages, Large must adjust depreciation in the year of disposition. Adjusted bases for the machinery and the building are computed as follows:

	<u>Machinery</u>	<u>Building</u>
Original cost	\$85,000	\$280,000
Accumulated depreciation:		
2009 (from above)	\$ 3,035	\$ 300
2010	23,418 ^a	7,179 ^c
2011	<u>2,091^b</u>	<u>5,085^d</u>
	<u>(28,544)</u>	<u>(12,564)</u>
Adjusted Basis:	<u>\$56,456</u>	<u>\$267,436</u>

^a\$85,000 x 0.2755 (Table 5, Year 2)

^b\$85,000 x 0.1968 x 0.5/4 (Table 5, Year 3)

^c\$280,000 x 0.02564 (Table 9, Year 2, 12th month)

^d\$280,000 x 0.02564 x 8.5/12 (Table 9, Year 3, 12th month)

pp. I:10-4 through I:10-10.

I:10-33 a. If Rita allocates the entire \$250,000 Sec. 179 expense to Asset A, the mid-quarter convention applies, as follows:

Cost of property in 4 th quarter (after Sec. 179)	\$255,000	(\$255,000 - \$0)
Cost of all property (after Sec. 179)	<u>545,000</u>	(\$795,000 - \$250,000)
Percentage of cost placed in service in 4 th quarter	<u>46.8%</u>	(\$255,000 ÷ \$545,000)

Asset A:

Sec. 179 expense	\$250,000
MACRS depreciation	72,500
[\$(540,000 - \$250,000) x 0.25 (Table 2, Year 1)]	

Asset B:

MACRS depreciation	<u>9,104</u>
[\$255,000 x 0.0357] (Table 5, Year 1)	
Total depreciation in 2009	<u>\$331,604</u>

b. If Rita allocates the entire \$250,000 Sec. 179 expense to Asset B, the half-year convention applies, as follows:

Cost of property in 4 th quarter (after Sec. 179)	\$ 5,000	(\$255,000 - \$250,000)
Cost of all property (after Sec. 179)	<u>545,000</u>	(\$795,000 - \$250,000)
Percentage of cost placed in service in 4 th quarter	<u>0.92%</u>	(\$5,000 ÷ \$545,000)

Asset A

MACRS depreciation	\$ 77,166
[\$540,000 x 0.1429 (Table 1, Year 1)]	

Asset B:

Sec. 179 expense	250,000
MACRS depreciation	<u>715</u>
[\$(255,000 - \$250,000) x .1429 (Table 1, Year 1)]	

Total depreciation in 2009

\$327,881

Thus, with these facts, Rita is better off expensing Asset A and using the mid-quarter convention. This result occurs because a high percentage of the cost (after Sec. 179) occurs in the first quarter, allowing that property to be depreciated at the higher (25%) mid-quarter percentage for property placed in service in the first quarter.

The outcome in this situation is particular to the given facts. Other facts can provide other outcomes. For example, in Problem I:10-29, the half-year convention gives the better first-year result. Thus, the tax planner must analyze each particular situation before reaching a conclusion.

pp. I:10-4 through I:10-10.

I:0-38 Depreciation deductions are computed as follows:

Year	MACRS Deduction (Table 1) (5- year recovery)	Ceiling Limit (Table 6)	Allowed Deduction*
2004	Bonus depreciation: $\$36,000 \times 50\% = \$18,000$ MACRS depreciation: $\$36,000 - \$18,000 = \$18,000 \times 0.20 = \$3,600$ Total depreciation in 2004 = \$21,600	\$10,610	\$10,610
2005	$\$18,000 \times 0.32 = \$5,760$	4,800	4,800
2006	$\$18,000 \times 0.192 = \$3,456$	2,850	2,850
2007	$\$18,000 \times 0.1152 = \$2,074$	1,675	1,675
2008	$\$18,000 \times 0.1152 = \$2,074$	1,675	1,675
2009	$\$18,000 \times 0.0576 = \$1,037$	1,675	1,037

*The allowed deduction is the lesser of (1) the regular MACRS deduction or (2) the ceiling amount.

Note: For subsequent years, a \$1,675 (times business-use percentage) ceiling limitation applies until the automobile is fully depreciated. pp. I:10-7, I:10-8, and I:10-13 through I:10-15.

I:0-46 a. If the IDCs are expensed, the cost depletion amount is \$40,000, computed as follows:

Acquisition cost	\$200,000
Divided by: Estimated recoverable units	<u>20,000</u>
Cost depletion per unit	\$ 10
Times: Units sold	<u>4,000</u>
Depletion amount	<u>\$ 40,000</u>

b. If the IDCs are capitalized, the cost depletion amount is \$44,000. The basis for cost depletion purposes is \$220,000. (\$200,000 cost + \$20,000 IDCs)

Basis	\$220,000
Divided by: Estimated recoverable units	<u>20,000</u>
Cost depletion per unit	\$ 11
Times: Units sold	<u>4,000</u>

Depletion amount \$ 44,000

- c. The greater of cost depletion or percentage depletion, not to exceed 100% of taxable income before depletion. Therefore, cost depletion of \$44,000 is deducted if the IDCs are capitalized, and \$40,000 if the IDCs are expensed, because percentage depletion is only \$25,000.
- d. Assuming Tina has substantial gross income, the immediate expense method is preferable because \$20,000 of IDCs may be expensed in the initial year while also deducting \$40,000 of cost depletion. Under the capitalization method, only \$44,000 can be deducted. pp. I:10-21 and I:10-22.

Case Study Problems

I:10-52 The following points should be mentioned in the client memo.

1. The tangible assets should be recorded at their FMV of \$400,000. Appraisals should be obtained to establish credibility for the individual asset allocations. It is preferable to allocate cost liberally to the inventory and depreciable assets. The sale of inventory results in an immediate tax benefit in the form of an increase in cost of goods sold, whereas allocations of cost to land affect only gain or loss upon a future sale.

2. It makes no difference for tax purposes whether the \$600,000 excess amount is allocated to a covenant not to compete or to goodwill, because both types of assets are Sec. 197 intangibles and are amortizable over a 15-year period. Section 197 applies to intangible assets acquired in connection with a transaction that involves the acquisition of a trade or business.