

E11-1

- a. C
- b. E
- c. C
- d. E
- e. C
- f. C
- g. E
- h. E
- i. C
- j. C
- k. E
- l. C

E11-2

a. $(\text{Cost} - \text{Salvage}) / \text{Useful life} = (\$1,200 - \$200) / 4 = \250 per year
 Straight-line percentage = $1/4 = 25\%$

b. $1 + 2 + 3 + 4 = 10$

Year	Digit	Depreciation rate	Depreciable cost	Depreciation Expense
1	1	4/10	\$1,000	\$400
2	2	3/10	\$1,000	300
3	3	2/10	\$1,000	200
4	4	1/10	\$1,000	100
Sum	10	1		\$1,000

Year	Remaining Book Value	Declining Balance Rate	Declining Balance Depreciation
1	\$1,200	$2 \times 25\% = 50\%$	\$600
2	600	50%	300
3	300	N/A**	100
Sum	200		\$1,000

** Since using the 50% depreciation rate would result in \$150 of depreciation, resulting in more depreciation than allowed over the asset's life, the formula is ignored. Enough depreciation is taken in year 3 so that the book value of the asset will equal its estimated salvage value of \$200. Another option would be for the company to spread the remaining depreciation over 2 years, switching to straight-line depreciation for years 3 and 4 (taking \$50 each year).

E11-3

a.	Depreciable cost:	<u>\$1,000</u>	= \$.01 per unit produced
	Expected output	100,000 units	
	Year 1	$40,000 \times \$.01 =$	\$400
	Year 2	$25,000 \times \$.01 =$	250
	Year 3	$20,000 \times \$.01 =$	200
	Year 4	$15,000 \times \$.01 =$	150
	TOTAL		\$1,000

b. Depreciation is based on estimates made at the beginning of the asset's useful life. Most likely, the company would depreciate the asset based on its original estimates. Another option would be to change the depreciation after the first year to reflect the new estimates. In that case, the company would depreciate the remaining book value over the remaining estimated production.

	Year 1	$50,000 \times \$.01 =$	\$500
	Remaining book value – Estimated salvage value / Estimated remaining production $(\$700 - 200) / 900 = \$.00555$ per unit		
	Year 2	$40,000 \times \$.00555 =$	\$222
	Year 3	$30,000 \times \$.00555 =$	167
	Year 4	$20,000 \times \$.00555 =$	111
	Total Depreciation		\$1,000

E11-4

Depreciable cost = Cost – Salvage value $\$50,000 - \$5,000 = \$45,000$

Straight-line percentage = $1/10 = 10\%$

Annual depreciation = $\$45,000 \times 10\% = \$4,500$

Total accumulated depreciation on the date of sale = $\$4,500 \times 3 = \$13,500$

Book Value on date of sale = Cost – total accumulated depreciation = $\$50,000 - \$13,500 = \$36,500$

a.	Sold for book value—No gain or loss recognized		
	Cash		36,500
	Accumulated depreciation		13,500
	Equipment		50,000
b.	Sold for less than book value		
	Book value		\$36,500
	Sale price		<u>20,000</u>
	Loss		\$16,500
	Cash		20,000
	Accumulated depreciation		13,500
	Loss on sale of equipment		16,500
	Equipment		50,000
c.	Sold for more than book value		
	Sale price		41,000

	Book value	<u>36,500</u>
	Gain	\$ 4,500
Cash	41,000	
Accumulated depreciation	13,500	
Equipment		50,000
Gain on sale of equipment		4,500

Book value on date of sale (\$60,000 – \$42,000)	\$18,000
Selling price	<u>12,000</u>
Loss on sale of equipment	\$ 6,000

Cash	12,000
Accumulated depreciation—Equipment	42,000
Loss on sale of equipment	6,000

Equipment 60,000

E11-5

Year	Remaining Book Value	Declining Balance Rate	Declining Balance Deprec	Straight-line on Remaining Balance	Depreciation Expense
		$2 \times 20\% =$			
2001	18,000	40%	7,200	$18,000/5 = 3,600$	\$ 7,200
2002	10,800	40%	4,320	$10,800/4 = 2,700$	4,320
2003	6,480	40%	2,592	$6,480/3 = 2,160$	2,592
2004	3,888	40%	1,555	$3,888/2 = 1,944$	1,944
2005	1,555	40%	622	$3,888/2 = 1,944$	<u>1,944</u>
Sum					\$18,000

E11-6

- a. Annual depreciation expense = \$7,000
 Total depreciation = \$7,000 × 8 = \$56,000
 Estimated salvage value = \$60,000 – \$56,000 = \$4,000

- b. Depreciation expense—Equipment 7,000
 Accumulated depreciation—Equipment 7,000

- c. Accumulated depreciation at 12/31/2001 \$35,000
 Depreciation expense for 2002 7,000
 Accumulated depreciation on date of sale \$42,000