

Determine property, plant, and equipment costs.

(LO 1)

E10-2 Benedict Company incurred the following costs.

1. Sales tax on factory machinery purchased	\$ 5,000
2. Painting of and lettering on truck immediately upon purchase	700
3. Installation and testing of factory machinery	2,000
4. Real estate broker's commission on land purchased	3,500
5. Insurance premium paid for first year's insurance on new truck	880
6. Cost of landscaping on property purchased	7,200
7. Cost of paving parking lot for new building constructed	17,900
8. Cost of clearing, draining, and filling land	13,300
9. Architect's fees on self-constructed building	10,000

Instructions

Indicate to which account Benedict would debit each of the costs.

E10-5 Yello Bus Lines uses the units-of-activity method in depreciating its buses. One bus was purchased on January 1, 2017, at a cost of \$148,000. Over its 4-year useful life, the bus is expected to be driven 100,000 miles. Salvage value is expected to be \$8,000.

Compute depreciation under units-of-activity method.

(LO 2)

Instructions

- Compute the depreciable cost per unit.
- Prepare a depreciation schedule assuming actual mileage was: 2017, 26,000; 2018, 32,000; 2019, 25,000; and 2020, 17,000.

E10-6 Rottino Company purchased a new machine on October 1, 2017, at a cost of \$150,000. The company estimated that the machine will have a salvage value of \$12,000. The machine is expected to be used for 10,000 working hours during its 5-year life.

Determine depreciation for partial periods.

(LO 2)

Instructions

Compute the depreciation expense under the following methods for the year indicated.

- Straight-line for 2017.
- Units-of-activity for 2017, assuming machine usage was 1,700 hours.
- Declining-balance using double the straight-line rate for 2017 and 2018.



E10-7 Linton Company purchased a delivery truck for \$34,000 on January 1, 2017. The truck has an expected salvage value of \$2,000, and is expected to be driven 100,000 miles over its estimated useful life of 8 years. Actual miles driven were 15,000 in 2017 and 12,000 in 2018.

Compute depreciation using different methods.

(LO 2)

Instructions

- Compute depreciation expense for 2017 and 2018 using (1) the straight-line method, (2) the units-of-activity method, and (3) the double-declining-balance method.
- Assume that Linton uses the straight-line method.
 - Prepare the journal entry to record 2017 depreciation.
 - Show how the truck would be reported in the December 31, 2017, balance sheet.

Journalize entries for disposal of plant assets.

(LO 3)

E10-9 Presented below are selected transactions at Ridge Company for 2017.

- | | |
|---------|---|
| Jan. 1 | Retired a piece of machinery that was purchased on January 1, 2007. The machine cost \$62,000 on that date. It had a useful life of 10 years with no salvage value. |
| June 30 | Sold a computer that was purchased on January 1, 2014. The computer cost \$45,000. It had a useful life of 5 years with no salvage value. The computer was sold for \$14,000. |
| Dec. 31 | Discarded a delivery truck that was purchased on January 1, 2013. The truck cost \$33,000. It was depreciated based on a 6-year useful life with a \$3,000 salvage value. |

Instructions

Journalize all entries required on the above dates, including entries to update depreciation, where applicable, on assets disposed of. Ridge Company uses straight-line depreciation. (Assume depreciation is up to date as of December 31, 2016.)

EXERCISE 10-2

1. Equipment
2. Equipment
3. Equipment
4. Land
5. Prepaid Insurance
6. Land Improvements
7. Land Improvements
8. Land
9. Buildings

EXERCISE 10-5

- (a) Depreciation cost per unit is \$1.40 per mile
[$(\$148,000 - \$8,000) \div 100,000$].

(b)	Computation			End of Year	
	Units of	Depreciation	Annual	Accumulated	Book
Year	Activity X	Cost/Unit	= Depreciation Expense	Depreciation	Value
2017	26,000	\$1.40	\$36,400	\$ 36,400	\$111,600
2018	32,000	1.40	44,800	81,200	66,800
2019	25,000	1.40	35,000	116,200	31,800
2020	17,000	1.40	23,800	140,000	8,000

EXERCISE 10-6

- (a) Straight-line method:

$$\left(\frac{\$150,000 - \$12,000}{5} \right) = \$27,600 \text{ per year.}$$

$$2017 \text{ depreciation} = \$27,600 \times 3/12 = \underline{\underline{\$6,900.}}$$

- (b) Units-of-activity method:

$$\left(\frac{\$150,000 - \$12,000}{10,000} \right) = \$13.80 \text{ per hour.}$$

2017 depreciation = 1,700 hours X \$13.80 = \$23,460.

(c) Declining-balance method:

2017 depreciation = \$150,000 X 40% X 3/12 = \$15,000.

Book value January 1, 2018 = \$150,000 – \$15,000 = \$135,000.

2018 depreciation = \$135,000 X 40% = \$54,000.

EXERCISE 10-7

(a) (1) 2017: $(\$34,000 - \$2,000)/8 = \underline{\$4,000}$
 2018: $(\$34,000 - \$2,000)/8 = \underline{\$4,000}$

(2) $(\$34,000 - \$2,000)/100,000 = \$0.32 \text{ per mile}$
 2017: 15,000 X \$0.32 = \$4,800
 2018: 12,000 X \$0.32 = \$3,840

(3) 2017: \$34,000 X 25% = \$8,500
 2018: $(\$34,000 - \$8,500) \times 25\% = \underline{\$6,375}$

(b) (1)	Depreciation Expense	4,000	
	Accumulated Depreciation—Equipment.....		4,000
(2)	Equipment	\$34,000	
	Less: Accumulated Depreciation—Equipment....	<u>4,000</u>	
		<u>\$30,000</u>	

EXERCISE 10-9

Jan.	1	Accumulated Depreciation—Equipment	62,000	
		Equipment.....		62,000
June	30	Depreciation Expense.....	4,500	
		Accumulated Depreciation—Equipment (\$45,000 X 1/5 X 6/12).....		4,500
	30	Cash	14,000	
		Accumulated Depreciation—Equipment (\$45,000 X 3/5 = \$27,000; \$27,000 + \$4,500)....	31,500	
		Gain on Disposal of Plant Assets [\$14,000 – (\$45,000 – \$31,500)]		500
		Equipment.....		45,000
Dec.	31	Depreciation Expense.....	5,000	
		Accumulated Depreciation—Equipment [((\$33,000 – \$3,000) X 1/6)].....		5,000
	31	Loss on Disposal of Plant Assets	8,000	
		Accumulated Depreciation—Equipment [((\$33,000 – \$3,000) X 5/6]	25,000	
		Equipment.....		33,000