

Review problem :

On January 4, 2001, Exeter purchased a machine for \$48, 120 and it was estimated to have a useful life of six years and a salvage value of \$15, 000.

On October 4, 2003, the motor in the machine was replaced at a total cost of \$7,685. It was determined that with the new motor, the total useful life of the machine should be revised to eight years and the salvage value would increase by \$2,000.

Required:

Record amortization expense on the machine for the year-ended December 31, 2003.

Capital assets Part 2

Objectives :

Account for asset disposal through discarding, selling, or exchanging an asset.

Account for natural resources and their amortization.

Account for intangible assets and their amortization.

Disposals of capital assets occur in one of three ways:

Discarding

Sale

Exchange.

The four accounting steps

1	Record amortization expense up to the date of disposal. This updates the accumulated amortization account.
2	Remove the balances of the disposed asset and related accumulated amortization accounts. Why? If the asset is gone, all accounts related to the asset (the asset account and its related accumulated amortization) must be taken off the books as well.
3	Record any cash (and other assets) received or paid in the disposal.
4	Record any gain or loss resulting from comparing the asset's book value with the net amount received or paid at disposal.

Discarding Capital Assets

- a) When accumulated amortization equals the asset's cost, the asset is fully amortized and the entry to record the discarding of this asset is:

I.e. Assume a machine costing \$9 000 and with accumulated amortization of \$9 000.

What are the ledger account values?

What are the discarding entries?

June 5	Accumulated amortization, Machinery	9 000	
	Machinery		9 000
	To record the discarding of fully amortized machinery		

b) When the asset is not fully amortized or whose amortization is not up to date.
i.e. equipment costing \$8 000 with accumulated amortization of \$6 000 on Dec. 31 2000. (straight-line, 8 years zero salvage value)

Apply the four steps:

July 1	Amortization expense	500	
	Accumulated amortization		500
	To record six months amortization. Jan. 1/01 to July 1/01; \$1 000 x 6/12		

To dispose of the asset

July 1, 2001	Accumulated amortization, equipment	6 500	
	Loss on disposal of equipment	1 500	
	Equipment		8 000
	To record the discarding of equipment having a book value of \$1 500		

c) Selling capital assets

i.e. April 1, 2002 sale of its delivery equipment costing \$16 000 with accumulated amortization of \$12 000 on December 31, 2001. Annual amortization on this equipment is \$4 000, using straight-line

	Sale at book value		
Apr. 1	Cash	3 000	
	Accum. amort. equipment	13 000	16 000
	To record the sale of equipment for \$3 000		
	Sale above book value (cash proceeds = \$ 7 000)		
	Cash	7 000	
	Accum. Amort. Equip.	13 000	
	Gain on disposal of equip.		4 000
	Equipment		16 000
	To record the sale of equipment for \$ 7 000		
	Sale below book value (cash proceeds = \$2 500)		
	Cash	2 500	
	Accum. Amort. Equip.	13 000	
	Loss on disposal of equip.	500	
	Equipment		16 000
	To record the sale of equipment for \$ 2500		

d) Exchanging capital assets

Many capital assets are disposed of by exchanging them for new assets.

Typically, the exchange is viewed as both a sale of the old asset and a purchase of a new asset.

Most exchanges involve gains and losses that are recognized when recording the exchange transactions.

i.e. On May 2, 2002, Crandell Cie exchanges an old automobile for a new one that has a fair market value of \$40 000. The original cost of the old automobile was \$30 000 and related accumulated amortization of \$ 12 000 up to the date of the exchange resulting in a book value of \$ 18 000. Crandell received a trade-in-allowance of \$19 000 and paid the balance in cash.

	Auto (new)	40 000	
	Accum. Amort. Auto (old)	12 000	
	Auto (old)		30 000
	Cash		21 000
	Gain on asset exchange		1 000
	To record exchange of old auto and cash for new automobile: gain = 19 000- 18 000		

Natural resources

Natural resources are assets that are physically consumed when used.

Timber, mineral deposits, oil and gas fields.

They are non current assets and are reported on the balance sheet under capital asset and separate category.

Units-of-production method

Intangible assets

Intangible assets are rights, privileges, and competitive advantages that have no physical substance and are used in operations.

i.e. copyrights, leaseholds, goodwill and trade-mark.

Accounting for intangible assets is similar to that for all other assets.

Amortization period for an intangible assets must be 40 to 20 years.

Intangible assets are amortized in a similar manner to other capital assets except for two differences:

1. Only the straight-line method is used for amortizing intangibles.
2. Amortization of intangible assets is usually credited directly to the intangible asset account.

Patents

A patent is an exclusive right granted to its owner to manufacture and sell a patented machine or device, or to use a process for a given period of times.

When patent rights are purchased, the cost is debited to an account called patents.

If the owner engages in lawsuits to effectively defend a patent, the cost of lawsuits is debited to patents.

However, the cost of research and development are expensed when incurred.

Copyrights

A copyrights gives its owner the exclusive right to publish and sell a musical, literary, or artistic work during the life of the creator plus 50 years.

The costs are amortized over its useful life.

Leaseholds

A leasehold refers to the rights granted to the lessee to use a specific asset by the lessor in the lease.

Leasehold improvements.

Leasehold improvements become part of the property and revert to the lessor at the end of the lease.

These costs are debited to a leasehold improvements account and amortized over the life of the lease or the life of the improvements.

Goodwill

Goodwill¹¹ is the amount by which the price paid for a company exceeds the fair market value of this company's net assets (assets minus liabilities) if purchased separately. This usually implies the company has certain valuable attributes not measured among its net assets. These can include superior management, skilled workforce, superior supplier and customer relations, quality products or services, excellent location, or other competitive advantages. Goodwill is a major part of many company purchases. For instance, **Bombardier's** purchase of **Waggon-fabrik**, a German manufacturer of transportation equipment, included goodwill of over \$40 million.

GAAP does not permit firms to record internally generated goodwill. Permission to do so could lead to abuse and values arrived at would lack objectivity. The purchase transaction provides objective evidence that goodwill exists. The purchase of a business is recorded by debiting the assets acquired and crediting the liabilities assumed at fair market values. Cash is credited for the purchase price of the business acquired and goodwill is debited for the amount that the purchase price exceeds the fair value of the net assets. To illustrate, assume that on January 2, 2002 **Canadian Tire** acquired **Best Tools** for \$8,000,000. The market value of Best Tools' assets was \$7,000,000 and its liabilities were valued at \$2,000,000. Goodwill is computed at \$3,000,000 as follows:

Purchase price to acquire Best Tools		\$8,000,000
Total market value of Best Tools' assets	\$7,000,000	
Less: Liabilities assumed	<u>2,000,000</u>	
Net assets purchased		<u>5,000,000</u>
Goodwill		<u>\$3,000,000</u>

Canadian Tire's entry to record the purchase is:

2001			
Jan. 2	Assets (shown individually)	7,000,000	
	Goodwill	3,000,000	
	Liabilities (shown individually)		2,000,000
	Cash		8,000,000
	<i>To record purchase of Best Tools and to record the excess of the purchase price over the net assets as goodwill.</i>		

Goodwill is amortized on a straight-line basis over its estimated useful life just like other intangible assets. To continue the example, Canadian Tire's annual entry to record goodwill assuming a 40-year amortization period is:

Dec. 31	Amortization Expense, Goodwill	75,000	
	Goodwill		75,000
	<i>To record the amortization of goodwill; \$3,000,000/40 years.</i>		

Trademarks and trade names

Companies adopt unique symbols or select unique names and brands in marketing their products.

When a trademark or trade name is purchased, its cost is debited to an asset account and amortized.

terms. Test your understanding of these terms by matching the appropriate definitions with the term. Write the number identifying the most appropriate definition in the blank space next to each term.

- | | |
|--|--|
| _____ Accelerated amortization | _____ Obsolescence |
| _____ Book value | _____ Salvage value |
| _____ Change in an accounting estimate | _____ Service life |
| _____ Declining-balance amortization | _____ Straight-line amortization |
| _____ Inadequacy | _____ Units-of-production amortization |
| _____ Income Tax Act | |
| _____ Land improvements | |

1. The amount that management predicts will be recovered at the end of a capital asset's service life through a sale or as a trade-in allowance on the purchase of a new asset.
2. A condition in which, because of new inventions and improvements, a capital asset can no longer be used to produce goods or services with a competitive advantage.
3. A method that allocates an equal portion of the total amortization for a plant asset (cost minus salvage) to each unit of product or service that it produces, or on a similar basis, such as hours of use or kilometres driven.
4. Assets that increase the usefulness of land but that have a limited useful life and are subject to amortization.
5. An amortization method in which a plant asset's amortization charge for the period is determined by applying a constant amortization rate (up to twice the straight-line rate) each year to the asset's beginning book value.
6. A method that allocates an equal portion of the total amortization for a plant asset (cost minus salvage) to each accounting period in its service life.
7. The codification of the Canadian federal tax laws.
8. The amount assigned to an item in the accounting records and in the financial statements; for a plant asset, book value is its original cost less accumulated amortization.
9. Amortization methods that produce larger amortization charges during the early years of an asset's life and smaller charges in the later years.
10. The length of time in which a capital asset will be used in the operations of the business.
11. A condition in which the capacity of plant assets becomes too small for the productive demands of the business.
12. A change in a calculated amount used in the financial statements that results from new information or subsequent developments and from better insight or improved judgment.

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_____ Amortization	_____ Leasehold improvements
_____ Balance sheet expenditure	_____ Lessee
_____ Betterment	_____ Lessor
_____ Capital expenditure	_____ Office Equipment Ledger
_____ Copyright	_____ Repairs
_____ Depletion	_____ Patent
_____ Goodwill	_____ Revenue expenditure
_____ Intangible asset	_____ Store Equipment Ledger
_____ Lease	_____ Trademark
_____ Leasehold	_____ Trade name

1. A subsidiary ledger that contains a separate record for each individual item of office equipment.
2. A subsidiary ledger that contains a separate record for each individual item of store equipment.
3. Exclusive right granted by the federal government to manufacture and sell a patented machine or device, or to use a process, for 17 years.
4. A modification to an asset to make it more efficient, usually by replacing one of its components with an improved or superior component.
5. An intangible asset of a business that creates future earnings greater than the average in its industry; recognized in the financial statements only when an entire business is acquired at a price in excess of the combined market values of its other assets.
6. An expenditure that produces economic benefits that do not fully expire before the end of the current period; because it creates or adds to existing assets, it should appear on the balance sheet as the cost of an asset.
7. Improvements to leased property made and paid for by the lessee.
8. An asset representing certain legal rights and economic relationships; it has no physical existence but is beneficial to the owner.
9. The individual or company that owns property to be used by a lessee under the terms of a lease.
10. A unique name used by a company in marketing its products or services.
11. An expenditure that should appear on the current income statement as an expense and be deducted from the period's revenues because it does not provide a material benefit in future periods.
12. The cost created by consuming the usefulness of natural resources.
13. An exclusive right granted by the federal government or by international agreement to publish and sell a musical, literary, or artistic work for a period of years.
14. The rights granted to a lessee by the lessor under the terms of a lease contract.

At the last meeting of the executive committee of Kearins, Ltd., the controller was severely criticized by both the president and vice president of production. The subject of criticism was in the recognition of periodic amortization. The president was unhappy with the fact that what he referred to as “a fictitious item” was deducted, resulting in depressed net income. In his words, “Amortization is a fiction when the assets being amortized are worth far more than we paid for them. What the controller is doing is unduly understating our net income. This in turn is detrimental to our shareholders because it results in the undervaluation of our shares on the market.”

The vice president was equally adamant about the periodic amortization charges; however, she presented a different argument. She said, “Our maintenance people tell me that the level of maintenance is such that our plant and equipment will last virtually forever.” She further stated that charging amortization on top of maintenance expenses is double-counting—it seems reasonable to charge either maintenance or amortization but not both.

The time taken by other pressing matters did not permit the controller to answer; instead, you were asked to prepare a report to the executive committee to deal with the issues raised by the president and vice president.

Required

The controller asks you, his assistant, to prepare the required report.