1. Tangible and intangible capital assets both are long-lived assets that are used by a business to produce revenue. The difference between them is that tangible capital assets have physical substance but intangible assets do not.

2. For capital assets, the cost principle means that cost consists of all expenditures necessary to acquire the asset and make it ready for its intended use. It also means that the assets are carried at cost, and not at market (unless fair market value is lower than cost).

3. (a) In a cash transaction, cost is equal to the cash paid.
(b) In a noncash transaction, cost is equal to the cash equivalent price paid—which is the fair market value of the asset given up or, if this is not clearly determinable, the fair market value of the asset received.

4. The cost principle has survived because it provides information that is objective and verifiable.

5. The purchase cost must be split between the land and building because the building is amortized and the land is not. In addition, the cost of each item will be necessary if the land, or the building, is later sold to determine any gain or loss on disposal.

6. The cost is allocated between the building and equipment based on the relative proportion each is of the appraised value.

   Building $350,000 ÷ $750,000 X $500,000 = $233,333
   Equipment $400,000 ÷ $750,000 X $500,000 = $266,667

7. Amortization is a process of allocating the cost of a capital asset to expense over its service (useful) life in a rational and systematic manner. There is no cash involved in the entry to record amortization (Dr. Amortization Expense; Cr. Accumulated Amortization). Recognition of amortization is not intended to result in the accumulation of cash for replacement of the asset.
Questions Chapter 10 (Continued)

8. (a) Residual value is the expected cash value of the asset at the end of its useful life. It is sometimes called salvage value. (b) Residual value is used in determining amortizable cost in each of the amortization methods except the declining-balance method.

9. (a) Useful life is expressed in years under the straight-line and declining-balance methods and in units-of-activity under the units-of-activity method. (b) The pattern of periodic amortization expense is constant under the straight-line method, decreases under the declining-balance method, and is variable depending on production levels under the units-of-activity method.

10. Balance sheet: Net book value is cost less accumulated amortization of a capital asset. Cost is the same under each method of amortization. The accumulated amortization is affected as follows: Straight-line—constant amount each period; units-of-activity—varying amount depending on production levels each period; declining-balance—decreasing amount each period. Consequently, the net book value will decline on the balance sheet as the asset ages. It will decline faster under the declining-balance method than the straight-line method in the early years and slower in the later years. The units-of-activity method is unpredictable. All three methods will result in the same net book value at the end of the asset’s useful life.

Income statement: The amortization expense is constant under the straight-line method, varies according to production under the units-of-activity method and declines over time with the declining-balance method. Consequently, net income is constant under the straight-line method, varies according to production under the units-of-activity method, and increases over time with the declining-balance method.

11. A revision of amortization is made in current and future years but not retroactively. Amortization is based on the information available at the time. It is an estimate. Continual restatement of prior periods would adversely affect the reader’s confidence in the financial statements.
Questions Chapter 10 (Continued)

12. Operating expenditures are ordinary repairs made to maintain the operating efficiency and expected productive life of the asset. Because they are recurring expenditures and normally benefit only the current period, they are expensed when incurred. Capital expenditures are additions and improvements made to increase efficiency, productivity, or expected useful life of the asset. Because they benefit future periods, capital expenditures are debited to the capital asset affected.

13. In a sale of capital assets, the net book value of the asset is compared to the proceeds received from the sale. If the proceeds of the sale exceed the net book value of the asset, a gain on disposal occurs. If the proceeds of the sale are less than the net book value of the asset sold, a loss on disposal occurs.

14. The capital asset and related accumulated amortization should continue to be reported on the balance sheet, without further amortization or adjustment, until the asset is retired. Reporting the asset and related accumulated amortization on the balance sheet informs the reader of the financial statements that the asset is still being used by the company. However, once an asset is fully amortized, no additional amortization should be taken on this asset, even if it is still being used. In no situation can the amortization on the capital asset exceed the cost of the asset.

15. Restoration costs, which are incurred at the end of a capital asset’s useful life, affect the amortizable cost of a natural resource. These costs relate to the life of the natural resource, and not just to the ending period in which they are incurred. They are amortized over the life of the asset to properly match them with the resulting revenue.

16. The amortizable cost of a natural resource includes cost less residual value plus any estimated removal and site restoration costs. In calculating the amortization expense for natural resources, the amortizable cost is expressed on a per unit basis, divided by the total production or activity anticipated. The amortizable cost per unit is then multiplied by the actual production output or activity sold for the period.

Questions Chapter 10 (Continued)
17. The intern is not correct. The cost of an intangible asset should be amortized over the shorter of that asset's useful life (the period of time when operations are benefited by use of the asset) or its legal life. If the intangible asset has an indefinite useful life, it is not amortized. It is tested frequently for impairment, however.

18. The favourable attributes which could result in goodwill include exceptional management, desirable location, good customer relations, skilled employees, high quality products, fair pricing policies, and harmonious relations with labour unions.

19. Goodwill is the value of many favourable attributes that are intertwined in the business enterprise. Goodwill can be identified only with the business as a whole and, unlike other assets, cannot be sold separately. Goodwill can only be sold if the entire business is sold.

20. Research and development costs present several accounting problems. It is sometimes difficult to assign the costs to specific projects, and there are uncertainties in identifying the extent and timing of future benefits. As a result, the CICA requires that all research and some development costs be recorded as an expense. Only certain development costs with reasonably assured future benefits can be capitalized. This is intended to maintain the objectivity and reliability of the financial statements.

21. The notes to financial statements should disclose the balance of the major classes of amortizable assets and the amortization method(s) and rates used. The balance of the major classes of unamortized assets should also be disclosed, in addition to any impairment information.

22. Salter Street Film’s asset turnover is calculated as follows:

\[
\frac{\text{Net sales}}{\text{Average total assets}} = \frac{\$48,766,938}{\$78,811,768} = 0.62 \text{ times}
\]
SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 10-1

(a) I  
(b) PPE  
(c) PPE  
(d) NA (current asset)  
(e) I  
(f) PPE  
(g) NA (current asset)  
(h) NR  
(i) NA (inventory)  
(j) I  
(k) I  
(l) NA (investment)  
(m) NR  
(n) NR  
(o) NR  
(p) I

BRIEF EXERCISE 10-2

All of the expenditures should be included in the cost of the land. The cost of the land is $63,000 ($54,000 + $3,000 + $2,500 + $3,500).

BRIEF EXERCISE 10-3

The cost of the truck is $25,400 (cash price $25,000 + painting and lettering $400). The expenditures for the insurance and the motor vehicle licence are recurring and only benefit the current period. They should be expensed and not be added to the cost of the truck.

BRIEF EXERCISE 10-4

Jan. 1  
Land ($280,000 X $100,000 ÷ $300,000) ........... 93,333  
Building ($280,000 X $200,000 ÷ $300,000) ...... 186,667  
Cash.............................................................. 80,000  
Mortgage Payable ........................................... 200,000
BRIEF EXERCISE 10-5

Amortizable cost is $30,000 ($32,000 – $2,000). With a 4-year useful life, annual amortization is $7,500 ($30,000 ÷ 4). Under the straight-line method, amortization is the same each year. Thus, amortization expense is $7,500 for both the first and second years.

BRIEF EXERCISE 10-6

The declining-balance rate is 50% (25% X 2) and this rate is applied to net book value at the beginning of the year. The calculations are:

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Book Value</th>
<th>X</th>
<th>Rate</th>
<th>Amortization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$32,000</td>
<td></td>
<td>50%</td>
<td>$16,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>16,000*</td>
<td></td>
<td>50%</td>
<td>8,000</td>
</tr>
</tbody>
</table>

* $32,000 – $16,000 = $16,000

BRIEF EXERCISE 10-7

Amortizable cost = ($36,500 – $500) ÷ 100,000 = $0.36
Year 1    30,000 kms. X $0.36 = $10,800
Year 2    20,000 kms. X $0.36 = $7,200
BRIEF EXERCISE 10-8

Net book value, 1/1/2002 ($32,000 – $12,000)................................. $  20,000
Less: Residual value.............................................................................. 2,000
Amortizable cost ................................................................................ 18,000
Remaining useful life ........................................................................... ÷ 2 years
Revised annual amortization expense................................................ $  9,000

Note: Previously, amortization expense was $6,000
[($32,000 - $2,000) ÷ 5].
2000: $ 6,000
2001: 6,000
2002: 9,000
2003: 9,000
Total $30,000

BRIEF EXERCISE 10-9

(a) O
(b) C
(c) C
(d) O
(e) C
(f) O
(g) O
(h) C
(i) C
(j) O
BRIEF EXERCISE 10-10

(a) Aug. 2  Accumulated Amortization
    —Delivery Equipment ............................ 41,000
        Delivery Equipment ............................ 41,000

(b) Aug. 2  Accumulated Amortization
    —Delivery Equipment ............................ 39,000
        Loss on Disposal ............................. 2,000
        Delivery Equipment ............................ 41,000

Cost of delivery equipment $41,000
Less: Accumulated amortization 39,000
Net book value at date of disposal 2,000
Proceeds from sale 0
Loss on disposal $2,000
BRIEF EXERCISE 10-11

(a) Sept. 30 Amortization Expense ........................................ 6,000
    Accumulated Amortization
    —Office Equipment ........................................ 6,000

(b) Sept. 30 Cash ............................................................ 26,000
    Accumulated Amortization
    —Office Equipment ($42,000 + $6,000) ............... 48,000
    Gain on Disposal ................................................ 2,000
    Office Equipment ............................................. 72,000

Cost of office equipment $72,000
Less accumulated amortization $48,000 ($42,000 + $6,000)
Net book value at date of disposal 24,000
Proceeds from sale 26,000
Gain on disposal $2,000
BRIEF EXERCISE 10-12

(a) Amortizable cost
   \[= \$7,000,000 - \$500,000 + \$1,000,000\]
   \[= \$7,500,000\]

   Amortizable cost per unit
   \[= \$7,500,000 \div 28,000,000 \text{ tonnes}\]
   \[= \$0.2679 \text{ per tonne}\]

   Restoration portion
   \[= \$1,000,000 \div 28,000,000 \text{ tonnes}\]
   \[= \$0.0357\]

   Amortization expense Year 1
   \[= \$0.2679 \times 6,000,000 \text{ tonnes} = \$1,607,400\]

   Restoration portion Year 1
   \[= \$0.0357 \times 6,000,000 \text{ tonnes} = \$214,200\]

   Aug. 31 Amortization Expense ......................... 1,607,400
   Accumulated Amortization .................. 1,393,200
   Liability for Restoration Costs.............. 214,200

(b) CUONO MINING CO.  
(Partial) Balance Sheet  
August 31, 2003

Assets

Capital assets
   Ore mine.......................................................... $7,000,000
   Less: Accumulated amortization................... 1,393,200 $5,606,800

Liabilities

Long-term liabilities
   Liability for restoration costs......................... $ 214,200
BRIEF EXERCISE 10-13

(a) Jan. 2  Patents .................................................. 160,000
           Cash .................................................. 160,000

(b) Dec. 31 Amortization Expense ($160,000 ÷ 10)...
       Patents .................................................. 16,000

(c) SURKIS COMPANY
    (Partial) Balance Sheet
    December 31, 2002

    Assets

    Capital assets
    Patents (net of $16,000 accumulated amortization).............. $144,000

BRIEF EXERCISE 10-14

JOKER COMPANY
(Partial) Balance Sheet
December 31, 2002

    Assets

    Capital assets
    Buildings .................................................................. $800,000
    Less: Accumulated amortization .................................. 650,000 $150,000
    Coal mine .................................................................. $200,000
    Less: Accumulated amortization .................................. 108,000 92,000
    Goodwill .................................................................. 410,000
    Total capital assets ................................................... $652,000

BRIEF EXERCISE 10-15

Asset turnover = $11,635.4 ÷ [($3,963.9 + $5,188.8) ÷ 2] = 2.54 times

Return on assets = $1,127.1 ÷ [($3,963.9 + $5,188.8) ÷ 2] = 24.6%
EXERCISE 10-1

(a) Dear ________:

The following information is provided in response to your question on the application of the cost principle to capital assets.

- Under the cost principle, the acquisition cost of a capital asset includes all expenditures necessary to acquire the asset and make it ready for its intended use. This includes not only the cost of acquisition, but any freight, installation, testing, and similar costs to get the asset ready for use. For example, the cost of factory machinery includes the purchase price, freight costs paid by the purchaser, insurance costs during transit, and installation costs. Costs such as these benefit the life of the factory machinery and not just the current period. Consequently, they should be capitalized and amortized over the machinery’s useful life.

- Cost is measured by the cash paid in a cash transaction, or by the cash equivalent price paid when noncash assets are used in payment. The cash equivalent price is equal to the fair market value of the asset given up. If that value is not clearly determinable, the fair market value of the asset received is used instead.

If you require any further information please contact me.

Sincerely,

(b) 1. Delivery Equipment (or Vehicles) 5. Factory Machinery
2. Licence Expense 6. Prepaid Insurance
3. Land Improvements 7. Factory Machinery
4. Land
EXERCISE 10-2

(a) **Cost of Land**

Cash paid................................................................. $90,000

Net cost of removing warehouse ($6,600 – $1,700)........ 4,900

Legal fee................................................................. 1,100

Total ................................................................. $96,000

(b) The architect’s fee ($7,800) should be debited to the Building account. The cost of the driveways and parking lot ($14,000) should be debited to Land Improvements.

EXERCISE 10-3

(a) Amortizable cost per unit is $1.20 per kilometre [($128,000 – $8,000) ÷ 100,000].

(b) Calculation

<table>
<thead>
<tr>
<th>Year</th>
<th>Units of Activity</th>
<th>Amortizable Cost/Unit</th>
<th>Amortization Expense</th>
<th>Accumulated Amortization</th>
<th>Net Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>28,000</td>
<td>$1.20</td>
<td>$33,600</td>
<td>$33,600</td>
<td>$94,400</td>
</tr>
<tr>
<td>2003</td>
<td>30,000</td>
<td>1.20</td>
<td>36,000</td>
<td>69,600</td>
<td>58,400</td>
</tr>
<tr>
<td>2004</td>
<td>25,000</td>
<td>1.20</td>
<td>30,000</td>
<td>99,600</td>
<td>28,400</td>
</tr>
<tr>
<td>2005</td>
<td>17,000</td>
<td>1.20</td>
<td>20,400</td>
<td>120,000</td>
<td>8,000</td>
</tr>
</tbody>
</table>
EXERCISE 10-4

(a)

<table>
<thead>
<tr>
<th>Year</th>
<th>Straight-Line</th>
<th>Units-of-Activity</th>
<th>Double Declining-Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$12,833</td>
<td>$13,090</td>
<td>$29,667</td>
</tr>
<tr>
<td>2003</td>
<td>12,833</td>
<td>11,550</td>
<td>19,775</td>
</tr>
</tbody>
</table>

(1) Straight-line method:

\[
\frac{$89,000 - $12,000}{6 \text{ years}} = $12,833 \text{ per year}
\]

2002 and 2003 amortization expense = $12,833

(2) Units-of-activity method:

\[
\frac{$89,000 - $12,000}{10,000 \text{ hours}} = $7.70 \text{ per hour}
\]

2002 amortization expense = 1,700 hours X $7.70 = $13,090
2003 amortization expense = 1,500 hours X $7.70 = $11,550

(3) Declining-balance method:

The declining-balance rate is \( \frac{1}{6} \times 2 = 33\frac{1}{3}\% \)

2002 amortization expense = $89,000 \times 33\frac{1}{3}\% = $29,667

Net book value January 1, 2003 = $89,000 − $29,667 = $59,333
2003 amortization expense = $59,333 \times 33\frac{1}{3}\% = $19,775

(b) Straight line method

(c) Cash flow is the same under all three methods. Amortization is an allocation of the cost of a capital asset and not a cash expenditure.
EXERCISE 10-5

(a) Old amortization rates used – Not required

Building: ($800,000 – $40,000) ÷ 40 yrs = $19,000 per year

Warehouse: ($100,000 – $5,000) ÷ 25 yrs = $3,800 per year

Current ages (years amortized)

Building: $114,000 ÷ $19,000 per year = 6 years
(equals the period from 1/1/96 to 1/1/02)

Warehouse: $9,500 ÷ $3,800 per year = 2.5 years
(equals the period from 1/7/99 to 1/1/02)

<table>
<thead>
<tr>
<th>Type of Asset</th>
<th>Building</th>
<th>Warehouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net book value, 1/1/02</td>
<td>$686,000</td>
<td>$90,500</td>
</tr>
<tr>
<td>Less: Residual value</td>
<td>70,000</td>
<td>3,600</td>
</tr>
<tr>
<td>Revised amortizable cost</td>
<td>616,000</td>
<td>86,900</td>
</tr>
<tr>
<td>Divide by revised remaining useful life, in years</td>
<td>(45 – 6) ÷ 39 yrs</td>
<td>(20 – 2.5) ÷ 17.5 yrs</td>
</tr>
<tr>
<td>Revised annual amortization expense</td>
<td>$15,795</td>
<td>$4,966</td>
</tr>
</tbody>
</table>

(b) Dec. 31 Amortization Expense ........................................... 15,795
    Accumulated Amortization—Building ................................... 15,795

31 Amortization Expense .................................................. 4,966
    Accumulated Amortization—Warehouse ....................... 4,966
MEMO

To: Client
From: Financial Advisor
Date: Today

The change in the amortization policy will increase the amortization period in cases where the contracted exhibition period is greater than two years. This will have the effect of spreading the cost over a longer period and, in the short–term, increasing net income. It will be more difficult to compare the current year’s results with previous years’ because of the change in estimated useful life. In evaluating Alliance’s performance, you would want to make an adjustment for this change in estimated life. If the contracted exhibition period is a good measure of the useful life of the broadcast rights and the revenue potential is consistent over this period, then the policy is reasonable.
EXERCISE 10-7

(a) July 1/01  
   Equipment .................................. 25,000  
   Cash ........................................... 25,000

(b) June 30/02  
   Amortization Expense ...................... 5,625  
   Accumulated Amortization  
   –Equipment .................................. 5,625  
   [($25,000 - $2,500) ÷ 4 years]

(c) July 1/02  
   Equipment .................................. 5,500  
   Cash ........................................... 5,500

(d) June 30/03  
   Amortization Expense ...................... 4,969  
   Accumulated Amortization  
   –Equipment .................................. 4,969

Net book value, July 1, 2002 ($25,000 - $5,625)........ $19,375  
Add: New part........................................... 5,500  
   24,875
Less: Residual value...................................... 5,000  
Amortizable cost ........................................ 19,875  
Remaining useful life (5 – 1)............................... 4 years  
Revised annual amortization expense .................. $ 4,969
EXERCISE 10-8

Jan. 1  Accumulated Amortization—Machinery......... 62,000
       Machinery ........................................... 62,000

June 30  Amortization Expense ............................. 833
         Accumulated Amortization—Computer .... 833
         ($5,000 ÷ 3 years X 6/12 mos.)

30  Cash............................................................ 500
    Accumulated Amortization—Computer .......... 4,166
    ($5,000 ÷ 3 years x 2.5 years)
    Loss on Disposal [$500 – ($5,000 – $4,166)] .... 334
    Computer ................................................. 5,000

Dec. 31  Amortization Expense ............................. 4,500
         Accumulated Amortization—Truck .......... 4,500
         [($30,000 – $3,000) ÷ 6 years]

31  Loss on Disposal [$0 – ($30,000 - $22,500)]..... 7,500
         Accumulated Amortization—Truck .......... 22,500
         [($30,000 – $3,000) ÷ 6 years x 5 years]
         Delivery Truck ...................................... 30,000
EXERCISE 10-9

(a) (1) Straight-line method
($10,000 - $1,000) ÷ 4 years = $2,250 per year

(2) Double-declining-balance method

DDB Rate: ¼ x 2 = 50%

Year 1: $10,000 x 50% = $5,000
Year 2: $10,000 - $5,000 = $5,000 x 50% = $2,500
Year 3: $5,000 - $2,500 = $2,500 x 50% = $1,250
Year 4: $2,500 - $1,250 = $1,250 x 50% = $625 but amount limited to $250 by salvage value

<table>
<thead>
<tr>
<th>Year</th>
<th>Straight-Line Amortization Expense</th>
<th>Straight-Line Net Book Value</th>
<th>Double Declining Balance Amortization Expense</th>
<th>Double Declining Balance Net Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$2,250</td>
<td>$7,750</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>2</td>
<td>2,250</td>
<td>5,500</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>3</td>
<td>2,250</td>
<td>3,250</td>
<td>1,250</td>
<td>1,250</td>
</tr>
<tr>
<td>4</td>
<td>2,250</td>
<td>1,000</td>
<td>250*</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td>$9,000</td>
<td></td>
<td>$9,000</td>
<td></td>
</tr>
</tbody>
</table>

* Do not amortize below salvage value.

(b) (1) Straight-line method

Proceeds - Net book value = Gain (loss)
$1,500 - $3,250 = ($1,750)

(2) Double declining-balance method

Proceeds - Net book value = Gain (loss)
$1,500 - $1,250 = $250
EXERCISE 10-9 (Continued)

(c)

<table>
<thead>
<tr>
<th>Year</th>
<th>Amortization expense</th>
<th>(1) Straight-Line</th>
<th>(2) Double Declining-Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td>$2,250</td>
<td>$5,000</td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td>2,250</td>
<td>2,500</td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
<td>2,250</td>
<td>1,250</td>
</tr>
<tr>
<td>Year 3</td>
<td>Loss (gain)</td>
<td>1,750</td>
<td>(250)</td>
</tr>
<tr>
<td>Total</td>
<td>expense over 3 year period</td>
<td>$8,500</td>
<td>$8,500</td>
</tr>
</tbody>
</table>

The total expense over the three year period is the same under each method, $8,500. The gain or loss simply adjusts for over amortization, or under amortization. The $8,500 total cost equals the original cost of $10,000 less proceeds from sale of $1,500.
EXERCISE 10-10

(a) Dec. 31  
Amortization Expense ($0.675 x 100,000 t) .... 67,500  
Accumulated Amortization—Mine .......... 48,750  
Liability for Restoration ...................... 18,750  
($150,000 ÷ 800,000 t x 100,000 t)

Amortizable cost  $480,000 + $150,000 - $90,000 = $540,000

Units estimated  800,000 tonnes (t)

Amortizable cost per unit  $540,000 ÷ 800,000 t = $0.675 per tonne

Portion applicable to restoration  $150,000 ÷ 800,000 t x 100,000 t = $18,750

Portion applicable to mine  ($480,000 - $90,000) ÷ 800,000 t x 100,000 t
  = $48,750

(b)  $54,000 of this amount (80,000 X $0.675) is expensed (as part of the cost of goods sold). The remaining $13,500 (20,000 X $0.675) is included in the ending inventory. The costs pertaining to the unsold tonnes are reported in current assets as part of inventory.

EXERCISE 10-11

Dec. 31  
Amortization Expense  ......................... 30,000  
Trademark ($150,000 ÷ 5)  ....................... 30,000

31  Amortization Expense  ......................... 6,000  
Patents ($45,000 ÷ 5 x 8/12)  .................... 6,000
EXERCISE 10-12

(a)

Jan.  1  Patents ..................................................  420,000  
        Cash ..................................................  420,000

April 1  Goodwill ..................................................  360,000  
        Cash ..................................................  360,000

Note: This would be part of the entry to record the purchase of another company.

July  1  Franchise ..................................................  450,000  
        Cash ..................................................  450,000

Sept. 1  Research Expense ........................................  185,000  
        Cash ..................................................  185,000

30  Development Expense ........................................  50,000  
        Cash ..................................................  50,000

(b)

Dec. 31  Amortization Expense ($60,000 + $22,500) ....  82,500  
        Patents ($420,000 ÷ 7) ..............................  60,000  
        Franchise [($450,000 ÷ 10) X 1/2] ............  22,500

Note: Because goodwill has an indefinite life, it is not amortized. Rather, it is tested annually for impairment.
EXERCISE 10-13

(a)

<table>
<thead>
<tr>
<th>Account</th>
<th>Statement</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated amortization—leasehold improvements</td>
<td>Balance sheet</td>
<td>Capital assets (PPE contra account)</td>
</tr>
<tr>
<td>Accumulated amortization—equipment</td>
<td>Balance sheet</td>
<td>Capital assets (PPE contra account)</td>
</tr>
<tr>
<td>Accumulated amortization—hockey franchise and rights to players</td>
<td>Balance sheet</td>
<td>Capital assets (intangible contra account)</td>
</tr>
<tr>
<td>Amortization expense</td>
<td>Income statement</td>
<td>Operating expenses</td>
</tr>
<tr>
<td>Equipment</td>
<td>Balance sheet</td>
<td>Capital assets (PPE)</td>
</tr>
<tr>
<td>Investments</td>
<td>Balance sheet</td>
<td>Long-term investments</td>
</tr>
<tr>
<td>Hockey franchise and rights to players</td>
<td>Balance sheet</td>
<td>Capital assets (intangible)</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>Balance sheet</td>
<td>Capital assets (PPE)</td>
</tr>
</tbody>
</table>

PPE—property, plant, and equipment

(b) NORTHWEST SPORTS ENTERPRISES
(Partial) Balance Sheet
June 30, 2000

**Assets**

<table>
<thead>
<tr>
<th>Capital assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasehold improvements</td>
<td>$1,124,248</td>
</tr>
<tr>
<td>Less: Accumulated amortization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>230,697</td>
</tr>
<tr>
<td></td>
<td>$ 893,551</td>
</tr>
<tr>
<td>Equipment</td>
<td>$1,081,364</td>
</tr>
<tr>
<td>Less: Accumulated amortization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>860,074</td>
</tr>
<tr>
<td></td>
<td>221,290</td>
</tr>
<tr>
<td>Hockey franchise and rights to players</td>
<td>$7,528,235</td>
</tr>
<tr>
<td>Less: Accumulated amortization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,693,850</td>
</tr>
<tr>
<td></td>
<td>5,834,385</td>
</tr>
<tr>
<td>Total capital assets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$6,949,226</td>
</tr>
</tbody>
</table>
SOLUTIONS TO PROBLEMS

PROBLEM 10-1A

<table>
<thead>
<tr>
<th>Item</th>
<th>Land</th>
<th>Building</th>
<th>Other Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>$145,000</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td>5,000 Property Tax Expense</td>
</tr>
<tr>
<td>4.</td>
<td>13,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td>600,000</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td>3,000 Land Improvements</td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td>15,000 Land Improvements</td>
</tr>
<tr>
<td>11.</td>
<td>(2,500)</td>
<td></td>
<td>15,000 Land Improvements</td>
</tr>
</tbody>
</table>

|             | $161,500 | $630,000 | $23,000 |

10-24
### MACHINE 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Calculation</th>
<th>Accumulated Amortization 12/31</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>$90,000* X 10%** = $9,000</td>
<td>$9,000</td>
</tr>
<tr>
<td>2000</td>
<td>$90,000 X 10% = $9,000</td>
<td>18,000</td>
</tr>
<tr>
<td>2001</td>
<td>$90,000 X 10% = $9,000</td>
<td>27,000</td>
</tr>
<tr>
<td>2002</td>
<td>$90,000 X 10% = $9,000</td>
<td>36,000</td>
</tr>
</tbody>
</table>

* $96,000 - $6,000 = $90,000  
** 1/10 years = 10%

### MACHINE 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Calculation</th>
<th>Accumulated Amortization 12/31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$60,000 X 25%* = $15,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>2001</td>
<td>$45,000 X 25% = $11,250</td>
<td>26,250</td>
</tr>
<tr>
<td>2002</td>
<td>$33,750 X 25% = $8,438</td>
<td>34,688</td>
</tr>
</tbody>
</table>

* 1/8 years = 12.5% x 2 = 25%

### MACHINE 3

<table>
<thead>
<tr>
<th>Year</th>
<th>Calculation</th>
<th>Accumulated Amortization 12/31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1,000 X ($60,000* ÷ 24,000) = $2,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>2002</td>
<td>4,500 X ($60,000 ÷ 24,000) = $11,250</td>
<td>13,750</td>
</tr>
</tbody>
</table>

* $66,000 - $6,000 = $60,000
PROBLEM 10-2A (Continued)

(b)  

<table>
<thead>
<tr>
<th>Year</th>
<th>Calculation</th>
<th>Amortization Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) 2000</td>
<td>$60,000 X 25% X 9/12 = $11,250</td>
<td>$11,250</td>
</tr>
<tr>
<td>(2) 2001</td>
<td>$48,750* X 25% = $12,188</td>
<td>$12,188</td>
</tr>
<tr>
<td>(3) 2002</td>
<td>$36,562 x 25% = $9,140</td>
<td>$ 9,140</td>
</tr>
</tbody>
</table>

* $60,000 - $11,250 = $48,750  
** $48,750 - $12,188 = $36,562
## PROBLEM 10-3A

### (a) STRAIGHT-LINE AMORTIZATION

<table>
<thead>
<tr>
<th>Year</th>
<th>Amortizable Cost</th>
<th>Amortization Rate</th>
<th>Amortization Expense</th>
<th>Accumulated Amortization</th>
<th>Net Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$90,000*</td>
<td>33⅓%**</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$70,000</td>
</tr>
<tr>
<td>2003</td>
<td>90,000</td>
<td>33⅓%</td>
<td>30,000</td>
<td>60,000</td>
<td>40,000</td>
</tr>
<tr>
<td>2004</td>
<td>90,000</td>
<td>33⅓%</td>
<td>30,000</td>
<td>90,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

* $100,000 - $10,000 = $90,000
** 1/3 years = 33⅓%

### DOUBLE DECLINING-BALANCE AMORTIZATION

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Book Value Beginning of Year</th>
<th>Amortization Rate</th>
<th>Amortization Expense</th>
<th>Accumulated Amortization</th>
<th>Net Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$100,000</td>
<td>66⅔%*</td>
<td>$66,667</td>
<td>$66,667</td>
<td>$33,333</td>
</tr>
<tr>
<td>2003</td>
<td>33,333</td>
<td>66⅔%</td>
<td>22,223</td>
<td>88,890</td>
<td>11,110</td>
</tr>
<tr>
<td>2004</td>
<td>11,110</td>
<td>66⅔%</td>
<td>1,110**</td>
<td>90,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

* 1/3 years = 33⅓% x 2 = 66⅔%
** Adjusted so ending net book value will equal residual value.

(b) Straight-line amortization provides the lower amount for 2002 amortization expense ($30,000) and, therefore, the higher 2002 income. Over the three-year period, both methods result in the same total amortization expense ($90,000) and, therefore, the same total income.

(c) Both methods will result in the same cash flow from operations in 2002 and over the three-year period. Recording amortization expense does not affect cash flow. It is only an allocation of the capital cost to expense over its useful life.
<table>
<thead>
<tr>
<th>Year</th>
<th>Amortization Expense</th>
<th>Accumulated Amortization</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$7,200*</td>
<td>$ 7,200</td>
</tr>
<tr>
<td>2001</td>
<td>7,200</td>
<td>14,400</td>
</tr>
<tr>
<td>2002</td>
<td>5,400**</td>
<td>19,800</td>
</tr>
<tr>
<td>2003</td>
<td>5,400</td>
<td>25,200</td>
</tr>
<tr>
<td>2004</td>
<td>5,400</td>
<td>30,600</td>
</tr>
<tr>
<td>2005</td>
<td>6,900***</td>
<td>37,500</td>
</tr>
</tbody>
</table>

Years 2000 and 2001:

* $40,000 – $4,000 = $7,200
5 years

Years 2002, 2003, and 2004:

** $40,000 – $14,400 – $4,000 = $5,400
6 – 2 years

Year 2005:

***$40,000 – $30,600 - $2,500 = $6,900
1 year

Proof: Accumulated amortization equals $37,500. Net book value is equal to $40,000 – $37,500 = $2,500 which is equal to the estimated residual value of $2,500.
<table>
<thead>
<tr>
<th>Account Debited</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equipment</td>
<td>Cost to prepare the equipment for use.</td>
</tr>
<tr>
<td>2. Land improvements</td>
<td>Non-permanent land expenditure.</td>
</tr>
<tr>
<td>3. Building</td>
<td>Improvement or betterment expenditure, which makes the factory office more productive.</td>
</tr>
<tr>
<td>4. Repair expense</td>
<td>Does not benefit future periods.</td>
</tr>
<tr>
<td></td>
<td>If the loss was considered to be significant, it would be recorded separately as a loss due to labour dispute, rather than as repair expense.</td>
</tr>
<tr>
<td>5. Equipment</td>
<td>Cost to prepare the equipment for use.</td>
</tr>
<tr>
<td>6. Repair expense</td>
<td>Does not benefit future periods.</td>
</tr>
<tr>
<td></td>
<td>If the damage was covered by insurance, a receivable (from the insurance company) account would be debited.</td>
</tr>
<tr>
<td></td>
<td>If the loss was considered to be significant, it would be recorded separately as a loss due to damages, rather than as repair expense.</td>
</tr>
</tbody>
</table>
PROBLEM 10-6A

(a)

Jan.  7  Equipment ..............................................  14,000
       Cash ..................................................  14,000

Feb.  7  Repair Expense .................................  1,000
       Cash ..................................................  1,000

Mar. 19 Repair Expense .................................  2,500
       Cash ..................................................  2,500

(b)

(1) **Years 1 and 2:**

\[
\frac{(\$100,000 - \$10,000)}{5} = \$18,000
\]

(2) **Years 3 – 7:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net book value, Jan. 7, Year 3 ($100,000 - $18,000 - $18,000)</td>
<td>$64,000</td>
</tr>
<tr>
<td>Add: Addition</td>
<td>$14,000</td>
</tr>
<tr>
<td>Add:</td>
<td>$78,000</td>
</tr>
<tr>
<td>Less: Revised residual value</td>
<td>$12,000</td>
</tr>
<tr>
<td>Revised amortizable cost</td>
<td>$66,000</td>
</tr>
<tr>
<td>Remaining useful life (7 – 2 years)</td>
<td>5 years</td>
</tr>
<tr>
<td>Revised annual amortization expense</td>
<td>$13,200</td>
</tr>
</tbody>
</table>

(3) $13,200  [as per calculation in part (2) above]
PROBLEM 10-7A

(a)

(1) **Straight-Line**

<table>
<thead>
<tr>
<th>Years</th>
<th>Amortization Expense</th>
<th>Net Book Value</th>
<th>Amortization Expense</th>
<th>Net Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$5,000</td>
<td>$16,000</td>
<td>$5,250</td>
<td>$15,750</td>
</tr>
<tr>
<td>2</td>
<td>5,000</td>
<td>11,000</td>
<td>3,938</td>
<td>11,812</td>
</tr>
<tr>
<td>3</td>
<td>5,000</td>
<td>6,000</td>
<td>2,953</td>
<td>8,859</td>
</tr>
<tr>
<td>4</td>
<td>5,000</td>
<td>1,000</td>
<td>2,215</td>
<td>6,644</td>
</tr>
<tr>
<td>Total</td>
<td>$20,000</td>
<td></td>
<td>$14,356</td>
<td></td>
</tr>
</tbody>
</table>

(2) **Declining-Balance**

<table>
<thead>
<tr>
<th>Years</th>
<th>Amortization Expense</th>
<th>Net Book Value</th>
<th>Amortization Expense</th>
<th>Net Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$5,000</td>
<td>$16,000</td>
<td>$5,250</td>
<td>$15,750</td>
</tr>
<tr>
<td>2</td>
<td>5,000</td>
<td>11,000</td>
<td>3,938</td>
<td>11,812</td>
</tr>
<tr>
<td>3</td>
<td>5,000</td>
<td>6,000</td>
<td>2,953</td>
<td>8,859</td>
</tr>
<tr>
<td>4</td>
<td>5,000</td>
<td>1,000</td>
<td>2,215</td>
<td>6,644</td>
</tr>
<tr>
<td>Total</td>
<td>$20,000</td>
<td></td>
<td>$14,356</td>
<td></td>
</tr>
</tbody>
</table>

(1) **STRAIGHT-LINE AMORTIZATION**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost</th>
<th>X</th>
<th>Rate</th>
<th>Amortization Expense</th>
<th>Accumulated Amortization</th>
<th>Net Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$20,000*</td>
<td>25%**</td>
<td>=</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>2</td>
<td>20,000</td>
<td>25%</td>
<td>=</td>
<td>5,000</td>
<td>10,000</td>
<td>11,000</td>
</tr>
<tr>
<td>3</td>
<td>20,000</td>
<td>25%</td>
<td>=</td>
<td>5,000</td>
<td>15,000</td>
<td>6,000</td>
</tr>
<tr>
<td>4</td>
<td>20,000</td>
<td>25%</td>
<td>=</td>
<td>5,000</td>
<td>20,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

* $21,000 - $1,000 = $20,000
** ¼ years = 25%

(2) **SINGLE DECLINING-BALANCE AMORTIZATION**

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Book Value of Year</th>
<th>X</th>
<th>Rate</th>
<th>Amortization Expense</th>
<th>Accumulated Amortization</th>
<th>Net Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$21,000</td>
<td>25%*</td>
<td>=</td>
<td>$5,250</td>
<td>$5,250</td>
<td>$15,750</td>
</tr>
<tr>
<td>2</td>
<td>15,750</td>
<td>25%</td>
<td>=</td>
<td>3,938</td>
<td>9,188</td>
<td>11,812</td>
</tr>
<tr>
<td>3</td>
<td>11,812</td>
<td>25%</td>
<td>=</td>
<td>2,953</td>
<td>12,141</td>
<td>8,859</td>
</tr>
<tr>
<td>4</td>
<td>8,859</td>
<td>25%</td>
<td>=</td>
<td>7,859**</td>
<td>20,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

* ¼ years = 25%
** Adjusted so ending net book value will equal salvage value.
PROBLEM 10-7A (Continued)

(b) 1. (i) Straight Line (ii) Declining Balance

<table>
<thead>
<tr>
<th></th>
<th>(i) Straight Line</th>
<th>(ii) Declining Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$21,000</td>
<td>$21,000</td>
</tr>
<tr>
<td>Accum. amortization</td>
<td>15,000</td>
<td>12,141</td>
</tr>
<tr>
<td>Net book value</td>
<td>6,000</td>
<td>8,859</td>
</tr>
<tr>
<td>Cash proceeds</td>
<td>7,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Gain (loss) on disposal</td>
<td>$1,000</td>
<td>($1,859)</td>
</tr>
</tbody>
</table>

2.

<table>
<thead>
<tr>
<th></th>
<th>$15,000</th>
<th>$12,141</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amortization expense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Loss on disposal</td>
<td></td>
<td>1,859</td>
</tr>
<tr>
<td>Less: Gain on disposal</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Net expense</td>
<td>$14,000</td>
<td>$14,000</td>
</tr>
</tbody>
</table>

In total the effect on net income is the same under both methods. This is because the method of amortization selected only affects the timing of the expense recognition. In total over the life of the asset, the expense recognized is the same.
PROBLEM 10-8A

(a) June 30  Accumulated Amortization
    —Delivery Equipment ............................................ 24,000
    Loss on Disposal.................................................. 21,000
    Delivery Equipment .............................................. 45,000

    Accumulated Amortization ($45,000 - $5,000) X 3/5 years = $24,000

(b) June 30  Cash ............................................................. 25,000
    Accumulated Amortization
    —Delivery Equipment ............................................ 24,000
    Gain on Disposal .................................................. 4,000
    Delivery Equipment .............................................. 45,000

(c) June 30  Cash ............................................................. 18,000
    Accumulated Amortization
    —Delivery Equipment ............................................ 24,000
    Loss on Disposal .................................................. 3,000
    Delivery Equipment .............................................. 45,000
<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Account Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architect fees</td>
<td>Building</td>
</tr>
<tr>
<td>Cost to demolish an old building that is on a piece of land intended for a new building</td>
<td>Land: it is a cost of getting the land ready for its intended use</td>
</tr>
<tr>
<td>Lawyer’s fees associated with a successful patent application</td>
<td>Patent</td>
</tr>
<tr>
<td>Lawyer’s fees associated with an unsuccessful patent application</td>
<td>Legal Fees Expense (Operating Expense): if the application was unsuccessful, then there is no asset</td>
</tr>
<tr>
<td>Cost of a grease and oil change on the company’s truck</td>
<td>Repairs and Maintenance Expense</td>
</tr>
<tr>
<td>Cost of installing a new roof on the company’s building</td>
<td>Building (it would be rare to find a separate capital asset set up for a “roof” account as distinct from the building)</td>
</tr>
<tr>
<td>Cost of painting the president’s office</td>
<td>Repairs and Maintenance Expense (Operating Expense)</td>
</tr>
<tr>
<td>Cost of CD’s and toner for the office computer and printer</td>
<td>Office Supplies Expense (Operating Expense)</td>
</tr>
<tr>
<td>Expenditure</td>
<td>Account Title</td>
</tr>
<tr>
<td>-------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Payment to a celebrity for endorsement of a product</td>
<td>Advertising Expense (Operating Expense): Some companies would allocate the cost according to the number of times that the advertisements are to be aired. A current asset, such as prepaid advertising, would be established for those costs related to future advertisements. However, in the real world, all such costs are generally charged to advertising expense</td>
</tr>
<tr>
<td>Cost of four new tires for the company delivery van</td>
<td>Repairs and Maintenance Expense (Operating Expense): Depending on the vehicle usage during a year, an argument could be made for capitalizing this expenditure. Again, in the real world, this expenditure is usually charged to expenses</td>
</tr>
<tr>
<td>Cost to rebuild the engine on the company delivery van</td>
<td>Delivery Van: The benefit should extend beyond one year; therefore, the amount would be capitalized as part of the cost of the delivery van</td>
</tr>
<tr>
<td>Cost to pave the company parking lot</td>
<td>Land Improvements</td>
</tr>
<tr>
<td>Cost of painting the corporate logo on the sides of the company delivery van</td>
<td>Repairs and Maintenance Expense (Operating Expense): Does not make the delivery van any more productive. This is also likely a recurring expense</td>
</tr>
</tbody>
</table>
PROBLEM 10-10A

1. Research Expense......................................................... 72,000
   Patents ($120,000 x 60%) ............................................. 72,000
   To correct patent cost.

   Patents ($120,000 ÷ 20 years) ...................................... 6,000
   Amortization Expense .................................................. 6,000
   To reverse recorded amortization expense.

   Amortization Expense .................................................. 2,400
   Patents [(120,000 - 72,000) ÷ 20 years] ......................... 2,400
   To record correct amortization expense.

2. Gain on Patent Appreciation.......................................... 94,400
   Patents........................................................................... 94,400
   To correct overvaluation of patent.

   Patents ($139,400 ÷ 20 years) ....................................... 6,970
   Amortization Expense .................................................. 6,970
   To reverse recorded amortization expense.

   Amortization Expense .................................................. 2,250
   Patents ($45,000 ÷ 20 years)......................................... 2,250
   To record correct amortization expense.

3. Amortization Expense.................................................... 1,500
   Goodwill.......................................................................... 1,500
   To reverse recorded amortization expense.

   Note: Goodwill is not amortized.

4. Charitable Donations Expense................................. 5,000
   Goodwill........................................................................ 5,000
PROBLEM 10-11A

(a) Jan. 2 Patent #1 ........................................... 12,000
    Cash .................................................. 12,000

June 30 Patent #2 ........................................... 125,000
    Cash .................................................. 125,000

Sept. 1 Advertising Expense ................................ 80,000
    Cash .................................................. 80,000

Oct. 1 Copyright #2 .......................................... 120,000
    Cash .................................................. 120,000

(b) Dec. 31 Amortization Expense ............................. 8,333
    Patent #1 ............................................. 8,333
    ($70,000 ÷ 10 years) + ($12,000 ÷ 9 years)

    31 Amortization Expense ................................. 3,125
    Patent #2 ............................................. 3,125
    ($125,000 ÷ 20 years X 6/12 mos.)

    31 Amortization Expense ................................. 4,800
    Copyright #1 .......................................... 4,800
    ($48,000 ÷ 10 years)

    31 Amortization Expense ................................. 5,000
    Copyright #2 .......................................... 5,000
    ($120,000 ÷ 6 years X 3/12 mos.)
PROBLEM 10-11A (Continued)

(c) TAR COMPANY
(Partial) Balance Sheet
December 31, 2002

Assets

Capital assets
Patents (net of $18,458 amortization) (1) ...................... $188,542
Copyrights (net of $29,000 amortization) (2) ............... 139,000
Total capital assets .............................................. $327,542

(1) Patent cost = $70,000 + $12,000 + $125,000 = $207,000
    Patent amortization = $7,000 + $8,333 + $3,125 = $18,458

(2) Copyright cost = $48,000 + $120,000 = $168,000
    Copyright amortization = $19,200 + $4,800 + $5,000 = $29,000
(a) April 1 Land............................................ 2,630,000
    Cash ............................................. 2,630,000

May 1 Amortization Expense ...................... 19,000
    Accumulated Amortization—Equipment 19,000
($570,000 ÷ 10 years X 4/12 mos.)

1 Cash............................................... 350,000
    Accumulated Amortization—Equipment 247,000
    Gain on Disposal ......................... 27,000
    Equipment ................................... 570,000

        Cost $570,000
        Accumulated amortization
        [($570,000 ÷ 10 years
         X 4 years) + $19,000] 247,000
        Net book value 323,000
        Cash proceeds 350,000
        Gain on disposal $27,000

June 1 Cash.............................................. 1,800,000
    Land ............................................. 200,000
    Gain on Disposal ............................. 1,600,000

July 1 Equipment ...................................... 2,000,000
    Cash ............................................. 2,000,000

Dec. 31 Amortization Expense ..................... 50,000
    Accumulated Amortization—Equipment 50,000
($500,000 ÷ 10 years)
PROBLEM 10-12A (Continued)

(a) (Continued)

Dec. 31  Accumulated Amortization—Equipment  500,000
        Equipment........................................  500,000
        Cost                                      $500,000
        Accumulated amortization
        ($500,000 ÷ 10 years X 10 years)            500,000
        Gain (loss) on disposal                     $0

(b) Dec. 31  Amortization Expense ......................  950,000
           Accumulated Amortization—Buildings         950,000
           ($28,500,000 X 1/30)

            31  Amortization Expense ......................  4,793,000
            Accumulated Amortization—Equipment          4,793,000
            $46,930,000 ÷ 10 years                     $4,693,000
            $2,000,000 ÷ 10 years X 6/12 mos.            100,000
            $4,793,000

          a$48,000,000 – $570,000 – $500,000 = $46,930,000
DUFOUR COMPANY  
(Partial) Balance Sheet  
December 31, 2003

<table>
<thead>
<tr>
<th>Capital assets*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$6,430,000</td>
</tr>
<tr>
<td>Buildings</td>
<td>$28,500,000</td>
</tr>
<tr>
<td>Less: Accumulated amortization</td>
<td></td>
</tr>
<tr>
<td>—buildings</td>
<td>13,050,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$48,930,000</td>
</tr>
<tr>
<td>Less: Accumulated amortization</td>
<td></td>
</tr>
<tr>
<td>—equipment</td>
<td>9,115,000</td>
</tr>
<tr>
<td>Total capital assets</td>
<td>$61,695,000</td>
</tr>
</tbody>
</table>