B EXERCISES

(L0 2) E10-1B  (Acquisition Costs of Realty)  The following expenditures and receipts are related to land, land improvements, and buildings acquired for use in a business enterprise. The receipts are enclosed in parentheses.

(a) Money borrowed to pay building contractor (signed a note)  $(357,500)
(b) Payment for construction from note proceeds  357,500
(c) Cost of land fill and clearing  10,400
(d) Delinquent real estate taxes on property assumed by purchaser  9,100
(e) Premium on 6-month insurance policy during construction  7,800
(f) Refund of 1-month insurance premium because construction completed early  (1,300)
(g) Architect’s fee on building  28,600
(h) Cost of real estate purchased as a plant site (land $200,000 and building $50,000)  325,000
(i) Commission fee paid to real estate agency  11,700
(j) Installation of fences around property  5,200
(k) Cost of razing and removing building  14,300
(l) Proceeds from salvage of demolished building (6,500)
(m) Interest paid during construction on money borrowed for construction  16,900
(n) Cost of parking lots and driveways  24,700
(o) Cost of trees and shrubbery planted (permanent in nature)  18,200
(p) Excavation costs for new building  3,900

Instructions
Identify each item by letter and list the items in columnar form, using the headings shown below. All receipt amounts should be reported in parentheses. For any amounts entered in the Other Accounts column, also indicate the account title.

<table>
<thead>
<tr>
<th>Item</th>
<th>Land</th>
<th>Land Improvements</th>
<th>Building</th>
<th>Other Accounts</th>
</tr>
</thead>
</table>

(L0 2) E10-2B (Acquisition Costs of Realty)  Allen Co. purchased land as a factory site for $80,000. The process of tearing down two old buildings on the site and constructing the factory required 6 months. The company paid $8,400 to raze the old buildings and sold salvaged lumber and brick for $1,260. It paid legal fees of $370 for title investigation and drawing up the purchase contract. Allen paid $440 to an engineering firm for a land survey, and $13,600 for drawing the factory plans. The land survey had to be made before definitive plans could be drawn. Title insurance on the property cost $300, and a liability insurance premium paid during construction was $180. The contractor’s charge for construction was $548,000. The company paid the contractor in two installments: $240,000 at the end of 3 months, and $308,000 upon completion. Interest costs of $34,000 were incurred to finance the construction.

Instructions
Determine the cost of the land and the cost of the building as they should be recorded on the books of Allen Co. Assume that the land survey was for the building.

(L0 2) E10-3B (Acquisition Costs of Trucks)  Lankford Corporation operates a retail computer store. To improve delivery services to customers, the company purchases four new trucks on April 1, 2010. The terms of acquisition for each truck are described below.

1. Truck #1 has a list price of $37,500 and is acquired for a cash payment of $34,750.
2. Truck #2 has a list price of $40,000 and is acquired for a down payment of $5,000 cash and a zero-interest-bearing note with a face amount of $35,000. The note is due April 1, 2011. Lankford would normally have to pay interest at a rate of 8% for such a borrowing, and the dealership has an incremental borrowing rate of 6%.
3. Truck #3 has a list price of $40,000. It is acquired in exchange for a computer system that Lankford carries in inventory. The computer system cost $30,000 and is normally sold by Lankford for $38,000. Lankford uses a perpetual inventory system.
4. Truck #4 has a list price of $35,000. It is acquired in exchange for 1,000 shares of common stock in Lankford Corporation. The stock has a par value per share of $10 and a market value of $26 per share.

Instructions
Prepare the appropriate journal entries for the foregoing transactions for Lankford Corporation. (Round computations to the nearest dollar).
2 • Chapter 10  Acquisition and Disposition of Property, Plant, and Equipment

(L0 2, 3)  E10-4B  (Purchase and Self-Constructed Cost of Assets)  Dade Co. both purchases and constructs various equipment it uses in its operations. The following items for two different types of equipment were recorded in random order during the calendar year 2011.

**Purchase**
- Cost to hire technicians to test equipment $10,000
- Cash paid for equipment, including sales tax of $31,000 $522,500
- Freight and insurance cost while in transit 7,000
- Cost of moving equipment into place at factory 2,850
- Special electrical wiring required for new equipment 3,200
- Repair cost incurred in first year of operations related to this equipment 500
- Insurance premium paid during first year of operation on this equipment 1,500

**Construction**
- Cost of installing equipment $6,500
- Material and purchased parts (gross cost $100,000; failed to take 2% cash discount) 100,000
- Labor costs 76,700
- Allocated overhead costs (fixed—$11,000; variable—$17,000) 28,000
- Imputed interest on funds used during construction (stock financing) 7,500
- Profit on self-construction 52,600

**Instructions**
Compute the total cost for each of these two pieces of equipment. If an item is not capitalized as a cost of the equipment, indicate how it should be reported.

(L0 2, 3)  E10-5B  (Treatment of Various Costs)  Backroad Company, a newly formed corporation, incurred the following expenditures related to Land, to Buildings, and to Machinery and Equipment.

- Attorney fee for title search $750
- Architect's fees 12,500
- Assessment by city for roads 18,600
- Cash paid for land and barn thereon 220,000
- Excavation before construction to prepare land for building 12,000
- Freight on equipment purchased 860
- Hauling charges for delivery of equipment from storage to new building 700
- Installation of equipment 2,600
- Interest on long-term loans during construction 16,000
- New building constructed (building construction took 6 months from date of purchase of land and barn) 721,600
- Removal of barn $10,000
- Less: Salvage 500 9,500
- Storage charges on equipment, necessitated because delivering was made early 1,500
- Trees, shrubs, and other landscaping after completion of building (permanent in nature) 9,200
- Equipment purchased (subject to 2% cash discount, which was not taken) 80,000

**Instructions**
Determine the amounts that should be debited to Land, to Buildings, and to Machinery and Equipment. Assume the benefits of capitalizing interest during construction exceed the cost of implementation. Indicate how any costs not debited to these accounts should be recorded.

(L0 3, 4)  E10-6B  (Correction of Improper Cost Entries)  Plant acquisitions for selected companies are presented below.

1. Protex Inc. acquired land, buildings, and equipment from a bankrupt company, for a lump-sum price of $700,000. At the time of purchase, the assets had the following book and appraisal values.

<table>
<thead>
<tr>
<th></th>
<th>Book Values</th>
<th>Appraisal Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$200,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Buildings</td>
<td>450,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>300,000</td>
<td>250,000</td>
</tr>
</tbody>
</table>

To be conservative, the company decided to take the lower of the two values for each asset acquired. The following entry was made.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>Buildings</td>
<td>250,000</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>250,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>700,000</td>
</tr>
</tbody>
</table>
2. Apple Industries purchased store equipment by making a $10,000 cash down payment and signing a 2-year, $40,000, 8% note payable. The purchase was recorded as follows.

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store Equipment</td>
<td>56,400</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Note Payable</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td>Interest Payable</td>
<td>6,400</td>
<td></td>
</tr>
</tbody>
</table>

3. Cherry Company purchased office equipment for $56,000, terms 1/10, n/30. Because the company intended to take the discount, it made no entry until it paid for the acquisition. The entry was:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Equipment</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>49,500</td>
<td></td>
</tr>
<tr>
<td>Purchase Discounts</td>
<td>500</td>
<td></td>
</tr>
</tbody>
</table>

4. Bubble Inc. recently received at zero cost land from the Village of Wellington as an inducement to locate its business in the Village. The appraised value of the land is $120,000. The company made no entry to record the land because it had no cost basis.

5. Gump Company built a factory for $750,000. It could have purchased the building for $900,000. The controller made the following entry.

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouse</td>
<td>900,000</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>750,000</td>
<td></td>
</tr>
<tr>
<td>Profit on Construction</td>
<td>150,000</td>
<td></td>
</tr>
</tbody>
</table>

**Instructions**

Prepare the entry that should have been made at the date of each acquisition.

**E10-7B  (Capitalization of Interest)** Bagwell Furniture Company started construction of a combination office and warehouse building for its own use at an estimated cost of $2,500,000 on January 1, 2010. Bagwell expected to complete the building by December 31, 2007. Bagwell has the following debt obligations outstanding during the construction period.

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction loan</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>December 31, 2009</td>
<td>15% interest, payable semiannually, issued</td>
</tr>
<tr>
<td>Short-term loan</td>
<td>700,000</td>
</tr>
<tr>
<td>at maturity on May 30, 2010</td>
<td>10% interest, payable monthly, and principal payable</td>
</tr>
<tr>
<td>Long-term loan</td>
<td>500,000</td>
</tr>
<tr>
<td>on January 1, 2014</td>
<td>11% interest, payable on January 1 of each year. Principal payable on January 1, 2014</td>
</tr>
</tbody>
</table>

**Instructions**

(Carry all computations to two decimal places.)

(a) Assume that Bagwell completed the office and warehouse building on December 31, 2010, as planned, at a total cost of $2,600,000, and the weighted average of accumulated expenditures was $1,800,000. Compute the avoidable interest on this project.

(b) Compute the depreciation expense for the year ended December 31, 2010. Bagwell elected to depreciate the building on a straight-line basis and determined that the asset has a useful life of 30 years and a salvage value of $150,000.

**E10-8B  (Capitalization of Interest)** On December 31, 2009, Jumble Inc. borrowed $1,000,000 at 10% payable annually to finance the construction of a new building. In 2010, the company made the following expenditures related to this building: June 1, $400,000; July 1, $600,000; September 1, $1,200,000; December 1, $600,000. Additional information is provided as follows.

1. Other debt outstanding
   - 10-year, 8% bond, dated December 31, 2008, interest payable annually $10,000,000
   - 15-year, 10% note, dated December 31, 2005, interest payable annually $2,500,000
2. Interest revenue earned in 2010 $6,000

**Instructions**

(a) Determine the amount of interest to be capitalized in 2010 in relation to the construction of the building.

(b) Prepare the journal entry to record the capitalization of interest and the recognition of interest expense, if any, at December 31, 2010.
On July 31, 2010, Robinson Company engaged Parrish Tooling Company to construct a special-purpose piece of factory machinery. Construction was begun immediately and was completed on November 1, 2010. To help finance construction, on July 31 Robinson issued a $450,000, 3-year, 10% note payable at Randazzo National Bank, on which interest is payable each July 31. Robinson paid $300,000 of the proceeds of the note to Parrish on July 31. The remainder of the proceeds was temporarily invested in short-term marketable securities at 8% until November 1. On November 1, Robinson made a final $150,000 payment to Parrish. Other than the note to Randazzo, Robinson’s only outstanding liability at December 31, 2010, is a $45,000, 6%, 6-year note payable, dated January 1, 2007, on which interest is payable each December 31.

**Instructions**

(a) Calculate the interest revenue, weighted-average accumulated expenditures, avoidable interest, and total interest cost to be capitalized during 2010. Round all computations to the nearest dollar.

(b) Prepare the journal entries needed on the books of Robinson Company at each of the following dates.

(1) July 31, 2010.

(2) November 1, 2010.


The following three situations involve the capitalization of interest.

**Situation I**
On January 1, 2010, Navarone, Inc. signed a fixed-price contract to have Homeward Construction construct a major plant facility at a cost of $8,000,000. It was estimated that it would take 2 years to complete the project. Also on January 1, 2010, to finance the construction cost, Navarone borrowed $8,000,000 payable in 8 annual installments of $1,000,000, plus interest at the rate of 8%. During 2010, Navarone made deposit and progress payments totaling $3,000,000 under the contract; the weighted-average amount of accumulated expenditures was $1,200,000 for the year. The excess borrowed funds were invested in short-term securities, from which Navarone realized investment income of $175,000.

**Instructions**
What amount should Navarone report as capitalized interest at December 31, 2010?

**Situation II**
During 2010, Holibox Corporation constructed and manufactured certain assets and incurred the following interest costs in connection with those activities.

<table>
<thead>
<tr>
<th>Interest Costs Incurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory constructed for Holibox’s own use</td>
</tr>
<tr>
<td>Inventories routinely manufactured, produced on a repetitive basis</td>
</tr>
<tr>
<td>Special-order machine for sale to unrelated customer, produced according to customer’s specifications</td>
</tr>
</tbody>
</table>

All of these assets required an extended period of time for completion.

**Instructions**
Assuming the effect of interest capitalization is material, what is the total amount of interest costs to be capitalized?

**Situation III**
Angelo, Inc. has a fiscal year ending June 30. On July 1, 2010, Angelo borrowed $5,000,000 at 10% to finance construction of its own building. Repayments of the loan are to commence the month following completion of the building. During the year ended June 30, 2011, expenditures for the partially completed structure totaled $1,500,000. These expenditures were incurred evenly throughout the year. Interest earned on the unexpended portion of the loan amounted to $121,000 for the year.

**Instructions**
How much should be shown as capitalized interest on Angelo’s financial statements at June 30, 2011?

(CPA adapted)

**E10-11B (Entries for Equipment Acquisitions)** Mays Engineering Corporation purchased conveyor equipment with a list price of $12,000. The vendor’s credit terms were 2/10, n/30. Presented below are three independent cases related to the equipment. Assume that the purchases of equipment are recorded gross. (Round to nearest dollar.)

(a) Mays paid cash for the equipment 8 days after the purchase.

(b) Mays traded in equipment with a book value of $2,400 (initial cost $9,600), and paid $11,400 in cash one month after the purchase. The old equipment could have been sold for $480 at the date of trade (assume similar equipment).
Mays gave the vendor a $12,960 zero-interest-bearing note for the equipment on the date of purchase. The note was due in one year and was paid on time. Assume that the effective interest rate in the market was 8%.

Instructions
Prepare the general journal entries required to record the acquisition and payment in each of the independent cases above. Round to the nearest dollar.

E10-12B (Entries for Asset Acquisition, Including Self-Construction) Below are transactions related to White Company.

(a) The City of Grand Junction gives the company 5 acres of land as a plant site. The market value of this land is determined to be $173,000.

(b) 10,000 shares of common stock with a par value of $10 per share are issued in exchange for land and buildings. The property has been appraised at a fair market value of $500,000, of which $150,000 has been allocated to land and $350,000 to buildings. The stock of White Company is not listed on any exchange, but a block of 300 shares was sold by a stockholder 12 months ago at $78 per share, and a block of 400 shares was sold by another stockholder 18 months ago at $62 per share.

(c) No entry has been made to remove from the accounts for Materials, Direct Labor, and Overhead the amounts properly chargeable to plant asset accounts for machinery constructed during the year. The following information is given relative to costs of the machinery constructed.

- Materials used: $18,000
- Factory supplies used: $1,250
- Direct labor incurred: $20,000
- Additional overhead (over regular) caused by construction of machinery, excluding factory supplies used: $3,000
- Fixed overhead rate applied to regular manufacturing operations of machinery: 25% of direct labor cost
- Cost of similar machinery if it had been purchased from outside suppliers: $83,000

Instructions
Prepare journal entries on the books of White Company to record these transactions.

E10-13B (Entries for Acquisition of Assets) Presented below is information related to Monday Company.

1. On July 6 Monday Company acquired the plant assets of Weld Company, which had discontinued operations. The appraised value of the property is:

<table>
<thead>
<tr>
<th>Property</th>
<th>Appraised Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$200,000</td>
</tr>
<tr>
<td>Building</td>
<td>$600,000</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>$400,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,200,000</strong></td>
</tr>
</tbody>
</table>

Monday Company gave 12,500 shares of its $10 par value common stock in exchange. The stock had a market value of $84 per share on the date of the purchase of the property.

2. Monday Company expended the following amounts in cash between July 6 and December 15, the date when it first occupied the building:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repairs to building</td>
<td>$73,000</td>
</tr>
<tr>
<td>Construction of bases for machinery to be installed later</td>
<td>17,000</td>
</tr>
<tr>
<td>Driveways and parking lots</td>
<td>88,000</td>
</tr>
<tr>
<td>Remodeling of office space in building, including new partitions and walls</td>
<td>184,000</td>
</tr>
<tr>
<td>Special assessment by city on land</td>
<td>19,000</td>
</tr>
</tbody>
</table>

3. On December 20, the company paid cash for machinery, $170,000, subject to a 3% cash discount, and freight on machinery of $8,000.

Instructions
Prepare entries on the books of Monday Company for these transactions.

E10-14B (Purchase of Equipment with Zero-Interest-Bearing Debt) Vaughn Inc. has decided to purchase equipment from Central Michigan Industries on January 2, 2010, to expand its production capacity to meet customers’ demand for its product. Vaughn issues an $500,000, 5-year, zero-interest-bearing note to Central Michigan for the new equipment when the prevailing market rate of interest for obligations of this nature is 8%. The company will pay off the note in five $100,000 installments due at the end of each year after the life of the note.
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**Instructions**

(a) Prepare the journal entry (entries) at the date of purchase. (Round to nearest dollar in all computations.)

(b) Prepare the journal entry (entries) at the end of the first year to record the payment and interest, assuming that the company employs the effective-interest method.

(c) Prepare the journal entry (entries) at the end of the second year to record the payment and interest.

(d) Assuming that the equipment had a 10-year life and no salvage value, prepare the journal entry necessary to record depreciation in the first year. (Straight-line depreciation is employed.)

**(L0 5)** **E10-15B (Purchase of Computer with Zero-Interest-Bearing Debt)** Dawson Corporation purchased a computer on December 31, 2009, for $75,000, paying $25,000 down and agreeing to pay the balance in five equal installments of $10,000 payable each December 31 beginning in 2010. An assumed interest rate of 8% is implicit in the purchase price.

**Instructions**

(a) Prepare the journal entry (entries) at the date of purchase. (Round to two decimal places.)

(b) Prepare the journal entry (entries) at December 31, 2010, to record the payment and interest (effective-interest method employed).

(c) Prepare the journal entry (entries) at December 31, 2011, to record the payment and interest (effective-interest method employed).

**(L0 5)** **E10-16B (Asset Acquisition)** Ogden Industries purchased the following assets and constructed a building as well. All this was done during the current year.

**Assets 1 and 2**

These assets were purchased as a lump sum for $186,000 cash. The following information was gathered.

<table>
<thead>
<tr>
<th>Description</th>
<th>Initial Cost on Seller's Books</th>
<th>Depreciation to Date on Seller's Books</th>
<th>Book Value on Seller's Books</th>
<th>Appraised Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery</td>
<td>$65,000</td>
<td>$30,000</td>
<td>$35,000</td>
<td>$160,000</td>
</tr>
<tr>
<td>Office furniture</td>
<td>25,000</td>
<td>10,000</td>
<td>15,000</td>
<td>40,000</td>
</tr>
</tbody>
</table>

**Asset 3**

This machine was acquired by making a $25,000 down payment and issuing a $75,000, 1-year, zero-interest-bearing note. The note is to be paid off in at the end of the first year. It was estimated that the asset could have been purchased outright for $91,000.

**Asset 4**

This machinery was acquired by trading in used machinery. (The exchange lacks commercial substance.) Facts concerning the trade-in are as follows.

- Cost of machinery traded: $150,000
- Accumulated depreciation to date of sale: 60,000
- Fair value of machinery traded: 96,000
- Cash received: 20,000
- Fair value of machinery acquired: 76,000

**Asset 5**

Machinery was acquired by issuing 1,000 shares of $1 par value common stock. The stock had a market value of $7 per share.

**Construction of Building**

A building was constructed on land purchased last year at a cost of $120,000. Construction began on March 1 and was completed on September 1. The payments to the contractor were as follows.

<table>
<thead>
<tr>
<th>Date</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/1</td>
<td>$200,000</td>
</tr>
<tr>
<td>5/1</td>
<td>300,000</td>
</tr>
<tr>
<td>6/1</td>
<td>100,000</td>
</tr>
<tr>
<td>9/1</td>
<td>400,000</td>
</tr>
</tbody>
</table>

To finance construction of the building, a $600,000, 10% construction loan was taken out on March 1. The loan was repaid on September 1. The firm had $400,000 of other outstanding debt during the year at a borrowing rate of 12%.

**Instructions**

Record the acquisition of each of these assets.
E10-17B (Nonmonetary Exchange) Phillips Corporation, which manufactures shoes, hired a recent college graduate to work in its accounting department. On the first day of work, the accountant was assigned to total a batch of invoices with the use of an adding machine. Before long, the accountant, who had never before seen such a machine, managed to break the machine. Phillips Corporation gave the machine plus $680 to Luzinski Business Machine Company (dealer) in exchange for a new machine. This transaction has commercial substance. Assume the following information about the machines.

<table>
<thead>
<tr>
<th>Phillips Corp. (Old Machine)</th>
<th>Luzinski Co. (New Machine)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine cost</td>
<td>$580</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>280</td>
</tr>
<tr>
<td>Fair value</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>$540</td>
</tr>
<tr>
<td></td>
<td>–0–</td>
</tr>
<tr>
<td></td>
<td>850</td>
</tr>
</tbody>
</table>

**Instructions**

For each company, prepare the necessary journal entry to record the exchange.


- List price of new press $24,800
- Cash paid 12,000
- Cost of old press (10-year life, $1,000 residual value) 35,000
- Accumulated depreciation—old press (straight-line) 27,200
- Second-hand market value of old press 6,600

**Instructions**

Prepare the journal entry(ies) necessary to record this exchange, assuming that the exchange (a) has commercial substance, and (b) lacks commercial substance. Ward’s fiscal year ends on December 31, and depreciation has been recorded through December 31, 2010.

E10-19B (Nonmonetary Exchange) Mathews Company exchanged equipment used in its manufacturing operations plus $6,000 in cash for similar equipment used in the operations of Biggio Company. The following information pertains to the exchange.

<table>
<thead>
<tr>
<th>Mathews Co.</th>
<th>Biggio Co.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment (cost)</td>
<td>$56,000</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>38,000</td>
</tr>
<tr>
<td>Fair value of equipment</td>
<td>25,000</td>
</tr>
<tr>
<td>Cash given up</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>$56,000</td>
</tr>
<tr>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>31,000</td>
</tr>
<tr>
<td></td>
<td>6,000</td>
</tr>
</tbody>
</table>

**Instructions**

(a) Prepare the journal entries to record the exchange on the books of both companies. Assume that the exchange lacks commercial substance.

(b) Prepare the journal entries to record the exchange on the books of both companies. Assume that the exchange has commercial substance.

E10-20B (Nonmonetary Exchange) Dean Inc. has negotiated the purchase of a new piece of automatic equipment at a price of $16,000 plus trade-in, f.o.b. factory. Dean Inc. paid $16,000 cash and traded in used equipment. The used equipment had originally cost $71,000; it had a book value of $32,500 and a secondhand market value of $36,800, as indicated by recent transactions involving similar equipment. Freight and installation charges for the new equipment required a cash payment of $2,500.

**Instructions**

(a) Prepare the general journal entry to record this transaction, assuming that the exchange has commercial substance.

(b) Assuming the same facts as in (a) except that fair value information for the assets exchanged is not determinable. Prepare the general journal entry to record this transaction.

E10-21B (Analysis of Subsequent Expenditures) Avedo Group has been in its factory for 20 years. Although the factory is quite functional, numerous repair costs are incurred to maintain it in sound working order. The company’s factory book value is currently $500,000, as indicated below.

- Original cost $1,100,000
- Accumulated depreciation 600,000
- Book value $500,000
During the current year, the following expenditures were made to the plant facility.

(a) Because of increased demands for its product, the company increased its plant capacity by building a new addition at a cost of $505,000.

(b) The entire factory was repainted at a cost of $8,500.

(c) The roof was an asbestos cement slate. For safety purposes it was removed and replaced with a metal shingle roof at a cost of $112,000. Book value of the old roof was $22,000.

(d) The plumbing system was completely updated at a cost of $43,500. The cost of the old plumbing system was not known. It is estimated that the useful life of the building will not change as a result of this updating.

(e) A series of major repairs were made at a cost of $21,000, because parts of the wood structure were rotting. The cost of the old wood structure was not known. These extensive repairs are estimated to increase the useful life of the building.

Instructions
Indicate how each of these transactions would be recorded in the accounting records.

E10-22B (Analysis of Subsequent Expenditures) The following transactions occurred during 2010. Assume that depreciation of 10% per year is charged on all machinery and 3% per year on buildings, on a straight-line basis, with no estimated salvage value. Depreciation is charged for a full year on all fixed assets acquired during the year, and no depreciation is charged on fixed assets disposed of during the year.

Jan. 30 A building that cost $250,000 in 1991 is torn down to make room for a new building. The wrecking contractor was paid $18,000 and was permitted to keep all materials salvaged.

Mar. 10 Machinery that was purchased in 2000 for $20,000 is sold for $1,500 cash, f.o.b. purchaser’s plant. Freight of $1,000 is paid on this machinery.

Mar. 20 A gear breaks on a machine that cost $12,000 in 2005. The gear is replaced at a cost of $750. The replacement does not extend the useful life of the machine.

May 18 A special base installed for a machine in 2004 when the machine was purchased has to be replaced at a cost of $6,000 because of defective workmanship on the original base. The cost of the machinery was $15,000 in 2004. The cost of the base was $3,000, and this amount was charged to the Machinery account in 2004.

June 23 One of the buildings is repainted at a cost of $12,000. It had not been painted since it was constructed in 2006.

Instructions
Prepare general journal entries for the transactions. (Round to the nearest dollar.)

E10-23B (Analysis of Subsequent Expenditures) Plant assets often require expenditures subsequent to acquisition. It is important that they be accounted for properly. Any errors will affect both the balance sheets and income statements for a number of years.

Instructions
For each of the following items, indicate whether the expenditure should be capitalized (C) or expensed (E) in the period incurred.

(a) Expenditure that increases the efficiency and effectiveness of a productive asset and increases the asset’s salvage value.

(b) Improvement.

(c) Replacement of a minor broken part on a machine.

(d) Expenditure that increases the useful life of an existing asset.

(e) Expenditure that increases the efficiency and effectiveness of a productive asset but does not increase its salvage value.

(f) Interest on borrowing necessary to finance a major overhaul of machinery. The overhaul extended the life of the machinery.

(g) Ordinary repairs.

(h) Improvement to a machine that increased its fair market value and its production capacity by 30% without extending the machine’s useful life.

(i) Expenditure that increases the quality of the output of the productive asset.

E10-24 (Entries for Disposition of Assets) On December 31, 2010, Autohome Inc. has a machine with a book value of $260,000. The original cost and related accumulated depreciation at this date are as follows.

<table>
<thead>
<tr>
<th>Machine</th>
<th>$980,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated depreciation</td>
<td>720,000</td>
</tr>
<tr>
<td>Book value</td>
<td>$260,000</td>
</tr>
</tbody>
</table>

Depreciation is computed at $72,000 per year on a straight-line basis.
Instructions
Presented below is a set of independent situations. For each independent situation, indicate the journal entry to be made to record the transaction. Make sure that depreciation entries are made to update the book value of the machine prior to its disposal.

(a) A hurricane completely destroys the machine on October 31, 2011. An insurance settlement of $460,000 was received for this casualty. Assume the settlement was received immediately.
(b) On June 1, 2011, Autohome sold the machine for $300,000.
(c) On August 31, 2011, the company donated this machine to the Royal Palm Beach City Council. The fair value of the machine at the time of the donation was estimated to be $610,000.

(L0 7) E10-25B (Disposition of Assets) On April 1, 2010, Clark Company received a condemnation award of $375,000 cash as compensation for the forced sale of the company’s land and building, which stood in the path of a new state highway. The land and building cost $50,000 and $350,000, respectively, when they were acquired. At April 1, 2010, the accumulated depreciation relating to the building amounted to $125,000. On August 1, 2010, Clark purchased a piece of replacement property for cash. The new land cost $70,000, and the new building cost $525,000.

Instructions
Prepare the journal entries to record the transactions on April 1 and August 1, 2010.