

**Chapter 8—Reporting and Analyzing Long-Term Operating Assets**

**Solutions to Practice Quiz**

1. The City Cinema purchased a new projector costing \$12,000 on January 1, 2016. Because of changing technologies, the projector is estimated to last 5 years after which it will have a salvage value of \$1,000.

What would be the depreciation expense for 2018 using the double-declining-balance depreciation method?

- a. \$2,880
- b. \$1,728
- c. \$1,584
- d. \$1,824

*Answer:* b

Rationale: Twice straight-line rate =  $2 \times 1/5 = 40\%$

2016:  $\$12,000 \times 40\% = \$4,800$

2017:  $(\$12,000 - 4,800) \times 40\% = \$2,880$

2018:  $(\$12,000 - 4,800 - 2,880) \times 40\% = \$1,728$

2. The City Cinema purchased a new projector costing \$12,000 on January 1, 2016. Because of changing technologies, the projector is estimated to last 5 years after which it will have a salvage value of \$1,000.

What would be the book value of the projector at the end of 2018 using the double-declining-balance depreciation method?

- a. \$2,736
- b. \$2,376
- c. \$2,592
- d. \$-0-

*Answer:* c

Rationale:  $\$12,000 - 4,800 - 2,880 - 1,728 = \$2,592$

3. In 2016, Remington Company reported an impairment charge relating to its long-term assets.

What effect does the asset write down from the impairment have?

- |                        |                      |
|------------------------|----------------------|
| a. Assets: Decrease    | Equity: Decrease     |
| Liabilities: No change | Cash Flow: No effect |
| b. Assets: No effect   | Equity: Decrease     |
| Liabilities: Decrease  | Cash Flow: No effect |
| c. Assets: Decrease    | Equity: Decrease     |
| Liabilities: Decrease  | Cash Flow: Decrease  |
| d. Assets: Decrease    | Equity: No change    |
| Liabilities: No change | Cash Flow: Decrease  |

*Answer: a*

Rationale: When a company records an impairment charge, assets are reduced by the amount of the write-down and the loss is recognized in the income statement, which reduces current period income.

4. Microsoft's famous Windows logo printed on every box of software is an example of:
- a. A trademark
  - b. A copyright
  - c. Goodwill
  - d. A patent

*Answer: a*

Rationale: A trademark is a registered name, logo, package design, image, jingle or slogan that is associated with a product.

5. Which of the following is a capital expenditure?
- a. A small expenditure for a long-lived asset, such as a \$15 stapler
  - b. Monthly rent of a delivery truck
  - c. Sales tax paid when purchasing office furniture.
  - d. An oil change for a delivery truck

*Answer: c*

Rationale: Costs that are capitalized would include the purchase price of a material asset plus any of the following: installation costs, taxes, shipping costs, legal fees, and setup costs.

6. Brian is an investor looking to invest the money he received from his tax return in a stock. He is particularly interested in mature, capital intensive, manufacturing companies with a history of earnings growth. He has narrowed his choices to four companies: Delmar Batteries, Point Industries, Benson Designs, and Marcus Imports. To compare these companies, Brian decides to look at their plant asset turnovers and use those numbers as a possible differentiation point when deciding which stock to buy.

	<u>Sales</u>	<u>Avg. PPE Assets</u>
Delmar Batteries.....	\$4,958	\$1,653
Point Industries.....	2,450	613
Benson Designs.....	6,475	3,238
Marcus Imports.....	5,435	3,106

When looking at the best PPE turnover among the four companies, which appears to have the most favorable rate?

- a. Delmar Batteries
- b. Point Industries
- c. Benson Designs
- d. Marcus Imports

Answer: b

Rationale: PPE Turnover = sales/average PPE assets

	<u>Sales</u>	<u>Avg. PPE Assets</u>	<u>PPE Turnover</u>
Delmar Batteries.....	\$4,958	\$1,653	2.999
Point Industries.....	2,450	613	3.997
Benson Designs.....	6,475	3,238	1.999
Marcus Imports.....	5,435	3,106	1.750

In capital intensive industries, a higher PPE turnover is favored over a lower one. In this example, it would appear that Point Industries reports the best turnover rate for plant assets, but that alone is too narrow a scope to make a sound investment decision.

7. Total stockholders' equity of Mattingly Company is \$2,400,000. The fair market value of Mattingly's net identifiable assets (assets less liabilities) is \$3,000,000. Ottuso Corporation makes an offer to purchase Mattingly's entire business for \$3,800,000.

In this situation:

- a. Mattingly Company should report goodwill of \$800,000 in its balance sheet.
- b. Mattingly Company should report goodwill of \$1,400,000 in its balance sheet.
- c. Ottuso Corporation is willing to pay \$800,000 for goodwill generated by Mattingly, and Ottuso will report this goodwill in its balance sheet if the purchase is finalized.
- d. Ottuso Corporation is willing to pay \$1,400,000 for goodwill generated by Mattingly, and Ottuso will report this goodwill in its balance sheet if the purchase is finalized.

*Answer: c*

Rationale: Goodwill is recorded only when one company acquires another company. It is calculated as the excess of the purchase price over the fair value of its identifiable assets (or  $\$3,800,000 - \$3,000,000 = \$800,000$ ).

8. Bowen Company acquired property for \$3,750,000 for the development of a silver mine on January 1. Bowen estimated that the mine would produce 1,250,000 tons of ore and once mining is completed, the property could be sold for \$250,000.

What is the depletion expense per ton of ore?

- a. \$2.80 per ton
- b. \$3.00 per ton
- c. \$3.20 per ton
- d. \$3.75 per ton

*Answer: a*

Rationale:  $(\$3,750,000 - \$250,000) / 1,250,000 = \$2.80$  per ton

9. Evergreen Company acquired property for \$4,800,000 to harvest timber on January 1, 2014. Evergreen estimated that the land would produce 2,000,000 board feet of timber and once harvesting was complete, the property could be sold for \$400,000. During 2014, 2015, and 2016, Evergreen recovered 60,000, 80,000, and 100,000 board feet of timber, respectively.

As a result, the land should appear on Evergreen's balance sheet at what amount (net of depletion) at the end of 2016?

- a. \$3,872,000
- b. \$4,272,000
- c. \$4,800,000
- d. \$4,400,000

*Answer:* b

Rationale:  $(60,000 + 80,000 + 100,000) / 2,000,000 = 12\%$  depleted

$\$4,800,000 - [(12\% \times (\$4,800,000 - 400,000))] = \$4,800,000 - \$528,000 = \$4,272,000$

10. Blanton Company purchased a delivery truck at a cost of \$40,000 on January 1. The truck has an estimated residual value of \$1,000 and an estimated life of 10 years. At the end of two years of service, Blanton reevaluated the tractor's useful life. They decided that the useful life should be extended an additional two years.

If the company uses straight-line depreciation, what amount would be recorded as the depreciation expense each year, beginning with the third year?

- a. \$3,250
- b. \$3,220
- c. \$3,900
- d. \$3,120

*Answer:* d

Rationale:  $(\$40,000 - 1,000) - (\$3,900 \times 2) = \$31,200$

$\$31,200 / 10 \text{ years} = \$3,120$