94. During 2000, ABC Corporation purchased stock as follows:

May 17, Purchased 1,000 shares of Quantus common stock for $75 per share.
July 12, Purchased 400 shares of Antonio common stock at $60 plus a $400 brokerage commission.

At December 31, 2000, the market values of the securities were as follows:

<table>
<thead>
<tr>
<th>Security</th>
<th>Market Value per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantus</td>
<td>$72</td>
</tr>
<tr>
<td>Antonio</td>
<td>$64 * 75 = $50</td>
</tr>
</tbody>
</table>

Required:
1. Prepare the journal entries to record the acquisition of the two investments.
2. Prepare any necessary adjusting entries assuming the stocks are both classified as available for sale securities.

(1.) May 17
   Investment in Quantus 75,000
   Cash 75,000

   Gain 75 - 61 = 14 * 400 = 5,600

   Loss 50 - 61 = (11) * 400 = 4,400

   Investment 4,400

(2.) Jul. 12
   Investment in Antonio 24,400
   Cash 24,400

   Gain 64 - 61 = 3 * 400 = 1,200

97. Flint Hills, Inc. has prepared a year-end trial balance. Certain accounts in the trial balance do not reflect all activities that have occurred.

Required: Prepare journal entries, as needed, for the following items.

(a.) The supplies account shows a balance of $540, but a count of supplies reveals only $210 on hand.

(b.) Flint Hills initially records the payments of all insurance premiums as expenses. The trial balance shows a balance of $420 in insurance expense. A review of insurance policies reveals that $125 of insurance is unexpired.

(c.) Flint Hills' employees work Monday through Friday, and salaries of $2,400 per week are paid each Friday. Flint Hills' year-end falls on Tuesday.

(d.) On January 10, 2000, Flint Hills received a utility bill for December electricity usage of $190.

Answer:
(a.) Supplies expense 330
   Supplies 330

(b.) Prepaid insurance 125
   Insurance expense 125

(c.) Salaries expense 960
   Salaries payable 960

(d.) Utilities expense 190
   Accounts payable 190
Present and future value tables of $1 at 3% are presented below:

<table>
<thead>
<tr>
<th>N</th>
<th>FV $1</th>
<th>PV $1</th>
<th>FVA $1</th>
<th>PVA $1</th>
<th>FVAD $1</th>
<th>PVAD $1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.03000</td>
<td>0.97087</td>
<td>1.0000</td>
<td>0.97087</td>
<td>1.0300</td>
<td>1.0000</td>
</tr>
<tr>
<td>2</td>
<td>1.06090</td>
<td>0.94260</td>
<td>2.0300</td>
<td>1.91347</td>
<td>2.0909</td>
<td>1.97087</td>
</tr>
<tr>
<td>3</td>
<td>1.09273</td>
<td>0.91514</td>
<td>3.0909</td>
<td>2.82861</td>
<td>3.1836</td>
<td>2.91347</td>
</tr>
<tr>
<td>4</td>
<td>1.12551</td>
<td>0.88849</td>
<td>4.1836</td>
<td>3.71710</td>
<td>4.3091</td>
<td>3.82861</td>
</tr>
<tr>
<td>5</td>
<td>1.15927</td>
<td>0.86261</td>
<td>5.3091</td>
<td>4.57971</td>
<td>5.4684</td>
<td>4.71710</td>
</tr>
<tr>
<td>6</td>
<td>1.19405</td>
<td>0.83748</td>
<td>6.4684</td>
<td>5.41719</td>
<td>6.6625</td>
<td>5.57971</td>
</tr>
<tr>
<td>7</td>
<td>1.22987</td>
<td>0.81309</td>
<td>7.6625</td>
<td>6.23028</td>
<td>7.8923</td>
<td>6.4119</td>
</tr>
<tr>
<td>8</td>
<td>1.26677</td>
<td>0.78941</td>
<td>8.8923</td>
<td>7.01969</td>
<td>9.1591</td>
<td>7.23028</td>
</tr>
<tr>
<td>9</td>
<td>1.30477</td>
<td>0.76642</td>
<td>10.1591</td>
<td>7.78611</td>
<td>10.4639</td>
<td>8.0169</td>
</tr>
<tr>
<td>10</td>
<td>1.34392</td>
<td>0.74409</td>
<td>11.4639</td>
<td>8.53020</td>
<td>11.8078</td>
<td>8.78611</td>
</tr>
<tr>
<td>11</td>
<td>1.38423</td>
<td>0.72242</td>
<td>12.8078</td>
<td>9.25262</td>
<td>13.1920</td>
<td>9.53020</td>
</tr>
<tr>
<td>12</td>
<td>1.42576</td>
<td>0.70138</td>
<td>14.1920</td>
<td>9.95400</td>
<td>14.6178</td>
<td>10.25262</td>
</tr>
<tr>
<td>13</td>
<td>1.46853</td>
<td>0.68095</td>
<td>15.6178</td>
<td>10.63496</td>
<td>16.0863</td>
<td>10.95400</td>
</tr>
<tr>
<td>14</td>
<td>1.51259</td>
<td>0.66112</td>
<td>17.0863</td>
<td>11.29607</td>
<td>17.5989</td>
<td>11.63496</td>
</tr>
<tr>
<td>15</td>
<td>1.55797</td>
<td>0.64186</td>
<td>18.5989</td>
<td>11.93794</td>
<td>19.1569</td>
<td>12.29607</td>
</tr>
<tr>
<td>16</td>
<td>1.60471</td>
<td>0.62317</td>
<td>20.1569</td>
<td>12.56110</td>
<td>20.7616</td>
<td>12.93794</td>
</tr>
</tbody>
</table>

54. Today Charlie deposited $10,000 in a three-year 12% CD that compounds quarterly. What is the maturity value of the CD?

Rationale:
\[ FV = \$10,000 \times 1.42576 \times 14.258 \]
\[ \approx \$14,258 \]
\[ \text{Rate} = \frac{\$10,000}{\$14,258} = 0.70138 \]

55. Today Claire deposited $20,000 in a four-year 12% CD that compounds quarterly. What is the maturity value of the CD?

\[ FV = \$20,000 \times 1.60471 \times 32.094 \]
\[ \approx \$32,094 \]
\[ \text{Rate} = \frac{\$20,000}{\$32,094} = 0.62317 \]

56. Carol wants to invest money in a 6% CD account that compounds semiannually. Carol would like the account to have a balance of $50,000 five years from now. How much must Carol deposit to accomplish her goal?

\[ PV = \$50,000 \times 1.4409 \times 37.205 \]
\[ \approx \$37,205 \]
\[ \text{Rate} = \frac{\$50,000}{\$37,205} = 1.34392 \]
9. On March 31, 1996, Winn Company traded in an old machine having a carrying amount of $16,800, and paid a cash difference of $6,000 for a new machine having a total cash price of $20,500. On March 31, 1996, what amount of loss should Winn recognize on this exchange?
   a. $0
   b. $2,300
   c. $3,700
   d. $6,000

10. During 1996, Beam Co. paid $1,000 cash and traded inventory, which had a carrying amount of $20,000 and a fair value of $21,000, for other inventory in the same line of business with a fair value of $22,000. What amount of gain (loss) should Beam record related to the inventory exchange?
   a. $2,000  Boot Paid
   b. $1,000
   c. $0  No Gain Recognized
   d. ($1,000)

11. Yola Co. and Zaro Co. are fuel oil distributors. To facilitate the delivery of oil to their customers, Yola and Zaro exchanged ownership of 1,200 barrels of oil without physically moving the oil. Yola paid Zaro $30,000 to compensate for a difference in the grade of oil. On the date of the exchange, cost and market values of the oil were as follows:

   \[
   \begin{array}{|c|c|c|}
   \hline
   & Yola Co. & Zaro Co. \\
   \hline
   \text{Cost} & $100,000 & $126,000 \\
   \text{Market values} & 120,000 & 150,000 \\
   \hline
   \end{array}
   \]

   In Zaro’s income statement, what amount of gain should be reported from the exchange of the oil?
   a. $0
   b. $4,800
   c. $24,000
   d. $30,000

12. Amble, Inc. exchanged a truck with a carrying amount of $12,000 and a fair value of $20,000 for a truck and $5,000 cash. The fair value of the truck received was $15,000. At what amount should Amble record the truck received in the exchange?
   a. $7,000
   b. $9,000
   c. $12,000
   d. $15,000

13. In an exchange of similar assets, Transit Co. received equipment with a fair value equal to the carrying amount of equipment given up. Transit also contributed cash. As a result of the exchange, Transit recognized
   a. A loss equal to the cash given up.
   b. A loss determined by the proportion of cash paid to the total transaction value.
   c. A gain determined by the proportion of cash paid to the total transaction value.
   d. Neither gain nor loss.

16. On July 1, 1996, Town Company purchased for $540,000 a warehouse building and the land on which it is located. The following data were available concerning the property:

   - **Current value**
     - **Seller's cost**
     - **Appraised value**
     - **Original cost**

   - **Land**
     - **4.0%**
     - **$200,000**
     - **$140,000**

   - **Warehouse building**
     - **6.0%**
     - **$300,000**
     - **280,000**
     - **$500,000**
     - **$420,000**

   Town should record the land at
   a. $140,000
   b. $180,000
   c. $200,000
   d. $216,000

30. The graph below depicts three depreciation expense patterns over time.

   ![Graph depicting three depreciation patterns](image)

   Which depreciation expense pattern corresponds to the sum-of-the-years'-digits method and which corresponds to the double-declining balance method?

   - **Sum-of-the-years'-digits**
   - **Double-declining balance**

   a. III  II
   b. II  I
   c. I  III
   d. II  III

   ![Truck (new) Cash Truck (old) Gain](image)
On April 1, 2000, Parks Co. purchased machinery at a cost of $42,000. The machinery is expected to last ten years and have a residual value of $6,000.

92. Required:
Compute depreciation expense for 2000 and 2001 and the book value of the machinery at December 31, 2000 and 2001, assuming the sum-of-the-years'-digits method is used.

Denominator = \( n(n+1)/2 = (10 	imes 11)/2 = 55 \)
Depreciable base = $42,000 - 6,000 = $36,000

2000 depreciation expense: \( \frac{10}{55} \times 36,000 \times \frac{9}{12} = \$4,909 \)

2001 depreciation expense: \( \frac{9}{55} \times 36,000 \times \frac{9}{12} + \left( \frac{10}{55} \times 36,000 \times \frac{3}{12} \right) = \$6,054 \)

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost</th>
<th>Depr. Expense</th>
<th>Accum. Depr.</th>
<th>Dec. 31 Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$42,000</td>
<td>$4,909</td>
<td>$4,909</td>
<td>$37,091</td>
</tr>
<tr>
<td>2001</td>
<td>42,000</td>
<td>6,054</td>
<td>10,963</td>
<td>31,037</td>
</tr>
</tbody>
</table>


Difficulty: Hard

Required:

Answer:
Straight-line rate = \( 1/10 \) years = 10%. DDB = 2 \times 10\% = 20%
Cost, April 1, 2000 = $42,000
2000 depreciation expense (20\% \times 9/12) = \$6,300
Book value, December 31, 2000 = \$35,700
2001 depreciation expense (20\%) = \$7,140
Book value, December 31, 2001 = \$28,560

\[ \frac{42,000 \times 20\%}{3} = 8400 \]

\[ \frac{33,600 \times 20\%}{3} = 6720 \]

\[ \frac{3/4 \times 8400}{1} = 6300 \]

\[ \frac{1/4 \times 8400}{1} = 2100 \]

\[ \frac{3/4 \times 6720}{1} = 5040 \]

\[ \frac{3/4 \times 6720}{1} = 7140 \]
Miami Company has elected to use the dollar-value LIFO retail method to value its inventory. The following data has been accumulated from the accounting records:

<table>
<thead>
<tr>
<th>Merchandise inventory, January 1, 2000</th>
<th>Cost</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$320,000</td>
<td>$500,000</td>
</tr>
</tbody>
</table>

Net purchases .......................... $670,000  1,020,000
Net markups ................................ 14,000
Net markdowns ................................ 4,000
Net sales .................................. 760,000

**Pertinent retail price indexes:**

<table>
<thead>
<tr>
<th>January 1, 2000</th>
<th>1.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2000</td>
<td>1.10</td>
</tr>
</tbody>
</table>

**Required:**

Estimate the ending inventory for December 31, 2000.

<table>
<thead>
<tr>
<th>Inventory Jan. 1</th>
<th>320,000</th>
<th>500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net purchases</td>
<td>670,000</td>
<td>1,020,000</td>
</tr>
<tr>
<td>Net markups</td>
<td>14,000</td>
<td></td>
</tr>
<tr>
<td>Net markdowns</td>
<td></td>
<td>(4,000)</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>670,000</td>
<td>1,020,000</td>
</tr>
<tr>
<td><strong>Cost-to-retail:</strong> ($670,000/$1,030,000 = 65.0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Goods available for sale</strong></td>
<td>990,000</td>
<td>1,530,000</td>
</tr>
<tr>
<td><strong>Net sales</strong></td>
<td>(760,000)</td>
<td></td>
</tr>
<tr>
<td><strong>Ending inventory at current year retail</strong></td>
<td>$770,000</td>
<td></td>
</tr>
</tbody>
</table>

**Step 1:**

<table>
<thead>
<tr>
<th>Ending Inventory at Year-end</th>
<th>Ending Inventory at Base Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>$770,000</td>
<td>$700,000</td>
</tr>
</tbody>
</table>

**Step 2:**

<table>
<thead>
<tr>
<th>Inventory Layers at Base Year</th>
<th>Inventory Layers Converted to Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500,000 x 1.00 x .64</td>
<td>$320,000</td>
</tr>
<tr>
<td>200,000 x 1.10 x .65</td>
<td>$143,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$463,000</td>
</tr>
</tbody>
</table>

104. On January 1, 1998, State Manufacturing purchased a milling machine at a cost of $25,000. The machine has been depreciated using the straight-line method using an estimated 10-year life and a $4,000 residual value. At December 31, 2000, State estimated that as of the beginning of the year the machine had a remaining life of five years and that the residual value would be $3,000.

**Required:**


<table>
<thead>
<tr>
<th>Equipment cost</th>
<th>$25,000</th>
</tr>
</thead>
</table>

Depreciation 1998 and 1999:

($25,000 - 4,000) / 10 x 2 years = 4,200

Book value December 31, 1999 20,800

Revised residual value 3,000

Depreciation base 17,800

Remaining life as of January 1, 2000 (years) + 5

Annual depreciation 2000 - 2001 $3,560

\[
\frac{2000}{1000} \times \frac{18800}{19800} \div \frac{10}{15} = \frac{3760}{3960}
\]
At the start of the current year, AT&T purchased 40% of Cable Corporation for $30 million. At the time of purchase, the book value of Cable's assets was $50 million. The fair market value of Cable's depreciable assets was $10 million in excess of their carrying value. For this year, Cable reported a net income of $50 million and declared and paid $10 million in dividends.

88. The amount of purchased goodwill is:
   A) $4 million.
   B) $6 million.
   C) $10 million.
   D) 0.

Answer: B Difficulty: Medium
Rationale:
\[
\begin{align*}
\text{Cost} & : \$30 \\
\text{FMV: 40\% x ($50 + $10)} & : (24) \\
\text{Goodwill} & : 6
\end{align*}
\]

89. The total amount of additional depreciation to be recognized over the remaining life of the assets is:
   A) $4 million.
   B) $6 million.
   C) $10 million.
   D) 0.

Answer: A Difficulty: Medium
Rationale:
\[
\begin{align*}
\text{FMV in excess of book value} & : \$10 \\
\text{Share of ownership} & : 40\% \\
\text{Additional depreciation, in total} & : 4
\end{align*}
\]

90. Cable's depreciable assets have an expected remaining service of life ten years. Goodwill is to be amortized over twenty years. For the current year, AT&T would report investment revenue from Cable of:
   A) $16,000,000.
   B) $19,600,000.
   C) $19,300,000.
   D) $20,000,000.

Answer: C Difficulty: Hard
Rationale:
\[
\begin{align*}
\text{Investee Net Assets} & \\
\text{Net Assets} & \text{Purchased} & \text{Difference} \\
\text{Cost} & $30 & \text{Goodwill = $6} \\
\text{Fair value} & (50 + 10) \times 40\% & 24 & 22 \\
\text{Book value} & 50 \times 40\% & 20 & 18 \\
\text{40\% of net income: 50 x 40\%} & & 20 & 18.20 \\
\text{Amortization of goodwill: 6/20} & & .3 & .3 \\
\text{Additional depreciation: 4/10} & & .4 & .4 \\
\text{Total} & $19.3 & 14.50 & 12.10
\end{align*}
\]