Solution to Chapter 7
E7-1,2,6,7,8,9,11,13

E7-1 Multiple-Choice Questions on Intercompany Inventory Transfers
[AICPA Adapted]

1. a

2. c

3. a

4. c

5. c Net assets reported $320,000
   Profit on intercompany sale $48,000
   Proportion of inventory unsold at year end
   ($60,000 / $240,000) x .25
   Unrealized profit at year end (12,000)
   Amount reported in consolidated statements $308,000

6. c Inventory reported by Banks ($175,000 + $60,000) $235,000
   Inventory reported by Lamm 250,000
   Total inventory reported $485,000
   Unrealized profit at year end
   [$50,000 x ($60,000 / $200,000)] (15,000)
   Amount reported in consolidated statements $470,000
E7-2 Multiple-Choice Questions on the Effects of Inventory Transfers
[AICPA Adapted]

1. b Cost of goods sold reported by Park $ 800,000
   Cost of goods sold reported by Small 700,000
   Total cost of goods sold reported $1,500,000
   Cost of goods sold reported by Park on sale to Small ($500,000 x .40) (200,000)
   Reduction of cost of goods sold reported by Small for profit on intercompany sale
   [($500,000 x 4 / 5) x .60] (240,000)
   Cost of goods sold for consolidated entity $1,060,000

   Note: Answer b in the actual CPA examination question was $1,100,000, requiring candidates to select the closest answer.

2. d $32,000 = ($200,000 + $140,000) – $308,000

3. b $6,000 = ($26,000 + $19,000) – $39,000

4. c $9,000 = Inventory held by Spin ($32,000 x .375) $12,000
   Unrealized profit on sale
   [($30,000 + $25,000) – $52,000] (3,000)
   Carrying cost of inventory for Power $ 9,000

5. b .20 = $14,000 / [(Stockholders' Equity $50,000) + (Patent $20,000)]

6. b 14 years = ($28,000 / [(28,000 - $20,000) / 4 years]

E7-6 Realized Profit on Intercompany Sale

a. Journal entries recorded by Nordway Corporation:

   (1) Inventory 960,000
      Cash (Accounts Payable) 960,000
   (2) Cash (Accounts Receivable) 750,000
      Sales 750,000
   (3) Cost of Goods Sold 600,000
      Inventory 600,000

b. Journal entries recorded by Olman Company:
Chapter 07 - Intercompany Inventory Transactions

(1) Inventory 750,000
    Cash (Accounts Payable) 750,000

(2) Cash (Accounts Receivable) 1,125,000
    Sales 1,125,000

(3) Cost of Goods Sold 750,000
    Inventory 750,000

C. Eliminating entry:

E(1) Sales 750,000
    Cost of Goods Sold 750,000

E7-7 Sale of Inventory to Subsidiary

A. Journal entries recorded by Nordway Corporation:

(1) Inventory 960,000
    Cash (Accounts Payable) 960,000

(2) Cash (Accounts Receivable) 750,000
    Sales 750,000

(3) Cost of Goods Sold 600,000
    Inventory 600,000

B. Journal entries recorded by Olman Company:

(1) Inventory 750,000
    Cash (Accounts Payable) 750,000

(2) Cash (Accounts Receivable) 810,000
    Sales 810,000

(3) Cost of Goods Sold 540,000
    Inventory 540,000

C. Eliminating entry:

E(1) Sales 750,000
    Cost of Goods Sold 708,000
    Inventory 42,000
E7-8 Inventory Transfer between Parent and Subsidiary

a. Karlow Corporation reported cost of goods sold of $820,000 ($82 x 10,000 desks) and Draw Company reported cost of goods sold of $658,000 ($94 x 7,000 desks).

b. Cost of goods sold for the consolidated entity is $574,000 ($82 x 7,000 desks).

c. Eliminating entry:

\[
\begin{align*}
E(1) & \quad \text{Sales} \quad 940,000 \\
& \quad \text{Cost of Goods Sold} \quad 904,000 \\
& \quad \text{Inventory} \quad 36,000 \\
\end{align*}
\]

d. Eliminating entry:

\[
\begin{align*}
E(1) & \quad \text{Retained Earnings, January 1} \quad 36,000 \\
& \quad \text{Cost of Goods Sold} \quad 36,000 \\
\end{align*}
\]

e. Eliminating entry:

\[
\begin{align*}
E(1) & \quad \text{Retained Earnings, January 1} \quad 21,600 \\
& \quad \text{Noncontrolling Interest} \quad 14,400 \\
& \quad \text{Cost of Goods Sold} \quad 36,000 \\
\end{align*}
\]
**Chapter 07 - Intercompany Inventory Transactions**

### E7-9 Income Statement Effects of Unrealized Profit

**a.**
- Sale price to Holiday Bakery per bag ($900,000 / 100,000) $9.00
- Profit per bag [$9.00 - ($9.00 / 1.5)] (3.00)
- Cost per bag $6.00
- Bags sold by Holiday Bakery (100,000 - 20,000) x 80,000
  - Consolidated cost of goods sold $480,000

**b.**
- E(1) Sales
  - Inventory ($3.00 x 20,000 bags) 60,000
  - Cost of Goods Sold 840,000

  Required Adjustment to Cost of Goods Sold:
  - Cost of goods sold — Farmco ($900,000 / 1.5) $600,000
  - Cost of goods sold — Holiday (9.00 x 80,000 units) 720,000
  - Consolidated cost of goods sold ($6.00 x 80,000 units) (480,000)
  - Required adjustment $840,000

**c.**
- Operating income of Holiday Bakery $400,000
- Net income of Farmco Products 150,000
- Less: Unrealized inventory profits (60,000)
- Consolidated net income $490,000
- Less: Income assigned to noncontrolling interest ($150,000 - $60,000 unrealized profit) x .40 (36,000)
- Income assigned to controlling interest $454,000

**Alternate computation:**
- Operating income of Holiday Bakery $400,000
- Net income of Farmco Products $150,000
- Unrealized profits ($3.00 x 20,000 units) (60,000)
- Realized net income $90,000
- Ownership held by Holiday Bakery x .60 54,000
- Income assigned to controlling interest $454,000

### E7-11 Computation of Consolidated Income Statement Data

**a.**
- Reported sales of Prem Company $400,000
- Reported sales of Cooper Company 200,000
- Intercompany sales by Prem Company in 20X5 $30,000
- Intercompany sales by Cooper Company in 20X5 80,000 (110,000)
- Sales reported on consolidated income statement $490,000

**b.**
- Cost of goods sold reported by Prem Company $250,000
- Cost of goods sold reported by Cooper Company 120,000
- Adjustment due to intercompany sales (100,500)
- Consolidated cost of goods sold $269,500
### Adjustment to cost of goods sold:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS charged by Prem on sale to Cooper</td>
<td>$20,000</td>
</tr>
<tr>
<td>CGS charged by Cooper ($30,000 - $6,000)</td>
<td>$24,000</td>
</tr>
<tr>
<td>Total charged to CGS</td>
<td>$44,000</td>
</tr>
<tr>
<td>CGS for consolidated entity</td>
<td></td>
</tr>
<tr>
<td>$20,000 x ($24,000 / $30,000)</td>
<td>(16,000)</td>
</tr>
<tr>
<td>Required adjustment to CGS</td>
<td>$28,000</td>
</tr>
<tr>
<td>CGS charged by Cooper on sale to Prem</td>
<td>$50,000</td>
</tr>
<tr>
<td>CGS charged by Prem ($80,000 - $20,000)</td>
<td>$60,000</td>
</tr>
<tr>
<td>Total charged to CGS</td>
<td>$110,000</td>
</tr>
<tr>
<td>CGS for consolidated entity</td>
<td></td>
</tr>
<tr>
<td>$50,000 x ($60,000 / $80,000)</td>
<td>(37,500)</td>
</tr>
<tr>
<td>Required adjustment to CGS</td>
<td>$72,500</td>
</tr>
<tr>
<td>Total adjustment required</td>
<td>$100,500</td>
</tr>
</tbody>
</table>

### c. Reported net income of Cooper Company

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealized profit on sale to Prem Company</td>
<td></td>
</tr>
<tr>
<td>$30,000 x ($20,000 / $80,000)</td>
<td>(7,500)</td>
</tr>
<tr>
<td>Realized net income</td>
<td>$37,500</td>
</tr>
<tr>
<td>Noncontrolling interest's share x .40</td>
<td></td>
</tr>
<tr>
<td>Income assigned to noncontrolling interest</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

### d. Reported net income of Prem Company

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less: Income from subsidiary</td>
<td>(27,000)</td>
</tr>
<tr>
<td>Net income of Cooper Company</td>
<td>45,000</td>
</tr>
<tr>
<td>Operating income</td>
<td>$125,000</td>
</tr>
<tr>
<td>Less: Unrealized inventory profits of Prem Company $10,000 x ($6,000 / $30,000)</td>
<td>$2,000</td>
</tr>
<tr>
<td>Unrealized inventory profits of Copper Company $30,000 x ($20,000 / $80,000)</td>
<td>7,500</td>
</tr>
<tr>
<td>Income assigned to noncontrolling interest</td>
<td>15,000</td>
</tr>
<tr>
<td>Income assigned to controlling interest</td>
<td>$98,500</td>
</tr>
</tbody>
</table>
E7-13 Intercompany Sales

a. Consolidated net income for 20X4:

\[
\begin{align*}
\text{Operating income of Hollow Corporation} & \quad \$160,000 \\
\text{Net income of Surg Corporation} & \quad 90,000 \\
\text{Less: Unrealized profit — Surg Corporation} & \quad (15,000) \\
\text{Consolidated net income} & \quad \$235,000
\end{align*}
\]

b. Inventory balance, December 31, 20X5:

\[
\begin{align*}
\text{Inventory reported by Hollow Corporation} & \quad \$30,000 \\
\text{Unrealized profit on books of Surg Corporation} & \quad (10,000) \\
\text{Inventory reported by Surg Corporation} & \quad \$110,000 \\
\text{Unrealized profit on books of Hollow Corporation} & \quad (55,000) \\
\text{Inventory, December 31, 20X5} & \quad \$75,000
\end{align*}
\]

c. Consolidated cost of goods sold for 20X5:

\[
\begin{align*}
\text{CGS on sale of inventory on hand January 1, 20X5} & \quad \$30,000 \\
\text{CGS on items purchased from Surg in 20X5} & \quad 70,000 \\
\text{CGS on items purchased from Hollow in 20X5} & \quad 85,000 \\
\text{Total cost of goods sold} & \quad \$185,000
\end{align*}
\]

d. Income assigned to controlling interest:

\[
\begin{align*}
\text{Operating income of Hollow Corporation} & \quad \$220,000 \\
\text{Net income of Surg Corporation} & \quad 85,000 \\
\text{Add: Inventory profit of prior year realized in 20X5} & \quad 15,000 \\
\text{Less: Unrealized inventory profit — Surg Corporation} & \quad (10,000) \\
\text{Unrealized inventory profit — Hollow Corporation} & \quad (55,000) \\
\text{Income to noncontrolling interest} & \quad (27,000) \\
\text{Income assigned to controlling interest} & \quad \$228,000
\end{align*}
\]