

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		<u>(12,000)</u>
	Amount reported in consolidated statements		<u>\$308,000</u>

6. c	Inventory reported by Banks (\$175,000 + \$60,000)	\$235,000
	Inventory reported by Lamm	<u>250,000</u>
	Total inventory reported	\$485,000
	Unrealized profit at year end [\$50,000 x (\$60,000 / \$200,000)]	<u>(15,000)</u>
	Amount reported in consolidated statements	<u>\$470,000</u>

**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	<u>700,000</u>
		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]	<u>(240,000)</u>
		Cost of goods sold for consolidated entity	<u>\$1,060,000</u>

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	\$12,000
				(\$32,000 x .375)	
				Unrealized profit on sale	
				[((\$30,000 + \$25,000) – \$52,000)]	<u>(3,000)</u>
				Carrying cost of inventory for Power	<u>\$ 9,000</u>

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:

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(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:

E(1)	Sales	940,000	
	Cost of Goods Sold		904,000
	Inventory		36,000

d. Eliminating entry:

E(1)	Retained Earnings, January 1	36,000	
	Cost of Goods Sold		36,000

e. Eliminating entry:

E(1)	Retained Earnings, January 1	21,600	
	Noncontrolling Interest	14,400	
	Cost of Goods Sold		36,000

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)]		<u>(3.00)</u>
	Cost per bag	\$	6.00
	Bags sold by Holiday Bakery (100,000 - 20,000)	x	<u>80,000</u>
	Consolidated cost of goods sold		<u><u>\$480,000</u></u>

b.	E(1)	Sales	900,000	
		Inventory (\$3.00 x 20,000 bags)		60,000
		Cost of Goods Sold		<u>840,000</u>

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)		<u>720,000</u>
		\$1,320,000
Consolidated cost of goods sold (\$6.00 x 80,000 units)		<u>(480,000)</u>
Required adjustment	\$	<u><u>840,000</u></u>

c.	Operating income of Holiday Bakery	\$400,000
	Net income of Farmco Products	<u>150,000</u>
		\$550,000
	Less: Unrealized inventory profits	<u>(60,000)</u>
	Consolidated net income	\$490,000
	Less: Income assigned to noncontrolling interest	
	(\$150,000 - \$60,000 unrealized profit) x .40	<u>(36,000)</u>
	Income assigned to controlling interest	<u><u>\$454,000</u></u>

Alternate computation:

Operating income of Holiday Bakery		\$400,000
Net income of Farmco Products	\$150,000	
Unrealized profits (\$3.00 x 20,000 units)	<u>(60,000)</u>	
Realized net income	\$	<u>90,000</u>
Ownership held by Holiday Bakery	x	<u>.60</u>
		54,000
Income assigned to controlling interest		<u><u>\$454,000</u></u>

E7-11 Computation of Consolidated Income Statement Data

a.	Reported sales of Prem Company	\$400,000	
	Reported sales of Cooper Company	<u>200,000</u>	
		\$600,000	
	Intercompany sales by Prem Company in 20X5	\$	<u>30,000</u>
	Intercompany sales by Cooper Company in 20X5	<u>80,000</u>	<u>(110,000)</u>
	Sales reported on consolidated income statement		<u><u>\$490,000</u></u>

b.	Cost of goods sold reported by Prem Company	\$250,000
	Cost of goods sold reported by Cooper Company	<u>120,000</u>
		\$370,000
	Adjustment due to intercompany sales	<u>(100,500)</u>
	Consolidated cost of goods sold	<u><u>\$269,500</u></u>

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Adjustment to cost of goods sold:

CGS charged by Prem on sale to Cooper	\$ 20,000	
CGS charged by Cooper (\$30,000 - \$6,000)	<u>24,000</u>	
Total charged to CGS	\$ 44,000	
CGS for consolidated entity		
\$20,000 x (\$24,000 / \$30,000)	<u>(16,000)</u>	
Required adjustment to CGS		\$ 28,000
CGS charged by Cooper on sale to Prem	\$ 50,000	
CGS charged by Prem (\$80,000 - \$20,000)	<u>60,000</u>	
Total charged to CGS	\$110,000	
CGS for consolidated entity		
\$50,000 x (\$60,000 / \$80,000)	<u>(37,500)</u>	
Required adjustment to CGS		<u>72,500</u>
Total adjustment required		<u>\$100,500</u>
c. Reported net income of Cooper Company		\$ 45,000
Unrealized profit on sale to Prem Company		
\$30,000 x (\$20,000 / \$80,000)		<u>(7,500)</u>
Realized net income		\$ 37,500
Noncontrolling interest's share		x .40
Income assigned to noncontrolling interest		<u>\$ 15,000</u>
d. Reported net income of Pem Company	\$107,000	
Less: Income from subsidiary	<u>(27,000)</u>	\$ 80,000
Net income of Cooper Company		<u>45,000</u>
Operating income		\$125,000
Less: Unrealized inventory profits of Prem		
Company [\$10,000 x (\$6,000 / \$30,000)]	\$ 2,000	
Unrealized inventory profits of Copper		
Company [\$30,000 x (\$20,000 / \$80,000)]	7,500	
Income assigned to noncontrolling		
interest	<u>15,000</u>	<u>(24,500)</u>
Income assigned to controlling interest		<u>\$ 98,500</u>

E7-13 Intercompany Sales

a. Consolidated net income for 20X4:

Operating income of Hollow Corporation		\$160,000
Net income of Surg Corporation		<u>90,000</u>
		\$250,000
Less: Unrealized profit — Surg Corporation		<u>(15,000)</u>
Consolidated net income		<u><u>\$235,000</u></u>

b. Inventory balance, December 31, 20X5:

Inventory reported by Hollow Corporation	\$ 30,000	
Unrealized profit on books of Surg Corporation		
(\$135,000 - \$90,000) x (\$30,000/\$135,000)	<u>(10,000)</u>	\$20,000
Inventory reported by Surg Corporation	\$110,000	
Unrealized profit on books of Hollow Corporation		
(\$280,000 - \$140,000) x (\$110,000/\$280,000)	<u>(55,000)</u>	<u>55,000</u>
Inventory, December 31, 20X5		<u><u>\$75,000</u></u>

c. Consolidated cost of goods sold for 20X5:

CGS on sale of inventory on hand January 1, 20X5		
\$45,000 x (\$120,000 / \$180,000)		\$ 30,000
CGS on items purchased from Surg in 20X5		
(\$135,000 - \$30,000) x (\$90,000 / \$135,000)		70,000
CGS on items purchased from Hollow in 20X5		
(\$280,000 - \$110,000) x (\$140,000 / \$280,000)		<u>85,000</u>
Total cost of goods sold		<u><u>\$185,000</u></u>

d. Income assigned to controlling interest:

Operating income of Hollow Corporation		\$220,000
Net income of Surg Corporation		<u>85,000</u>
		\$305,000
Add: Inventory profit of prior year realized in 20X5		15,000
Less: Unrealized inventory profit — Surg Corporation		(10,000)
Unrealized inventory profit — Hollow Corporation		(55,000)
Income to noncontrolling interest		
(\$85,000 + \$15,000 - \$10,000) x .30		<u>(27,000)</u>
Income assigned to controlling interest		<u><u>\$228,000</u></u>