

Zenab Distributors70.00% **LIFO**

40202

As reported	COGS		61,300	Purchases	Plug		61,600		
	Ending Inventory		25,200	Beginning Inventory			24,900		
	Total		86,500	= Total			86,500		
All FIFO	COGS	Plug	59,800	Purchases			61,600		
	Ending Inventory			Beginning Inventory					
	=	25,200	+	5,100	30,300	24,900	+	3,600	28,500
	Total		90,100	= Total			90,100		

All Beginning inventory Carried at FIFO value			28,500
LIFO Beginning Inventory Carried at FIFO Value	70.00% x	28,500	= 19,950
This LIFO layer increased in value by =	5,100	- 3,600	= 1,500
So Cost Increase Rate (Specific Inflation Rate)	1,500 ÷	19,950	= 7.52%

Cost of Goods (LIFO)	=	Cost of Goods Sold (FIFO)		
	+	Beg. Inventory (FIFO)	x	Cost Inflation Rate
	=	59,800 + 28,500	x	7.52% = 61,943

**Zenab Distributors
Income statement****A answer**

	Year 2	FIFO	As is	LIFO
Sales		92,700	92,700	92,700
Cost of Goods Sold		59,800	61,300	61,943
Gross profit		32,900	31,400	30,757
Selling and general expense		26,400	26,400	26,400
Pretax income		6,500	5,000	4,357
Income tax expense	40.00%	2,600	2,000	1,743
Net income		3,900	3,000	2,614

Faybech Parts

From the analysis of Zenab distributors, the cost inflation rate from year 1 to 2 is: 7.52%

Cost of Goods (LIFO)	=	Cost of Goods Sold (FIFO)		
	+	Beg. Inventory (FIFO)	x	Cost Inflation Rate
	=	52,000 + 22,300	x	7.52% = 53,677
Ending Inventory under LIFO	=	30,300 - 22,300	x	7.52% = 28,623

Income statement:

	Year 2	FIFO	LIFO	
Sales		77,000	77,000	
Cost of Goods Sold		52,000	53,677	
Gross profit		25,000	23,323	
Selling and general expense		21,500	21,500	
Pretax income		3,500	1,823	
Income tax expen	40.00%	1,400	729	
Net income		2,100	1,094	Difference 671

Cash Flow from Operations

Net income	2,100	1,094	
- Increase in Accounts Receivables	(2,500)	(2,500)	
- Increase in Inventories	(8,000)	(6,323)	
Cash Flow from Operations	(8,400)	(7,729)	(671)

Next Problem**A. As reported**

Year	Zenab		Faybech		
	1	2	1	2	
Average inventory		25,050		26,300	
Ratios					B.
Current ratio	2.89	2.65	3.24	3.67	😊 Higher
Inventory turnover		2.45	Lower	1.98	😞 Lower
Gross profit margin		33.87%	Lower	32.47%	=
Pretax profit margin		5.39%	Lower	4.55%	😞 Lower

C. Both FIFO

Year	Zenab		Faybech	
	1	2	1	2
Current Assets (as reported)	33,500	33,600		
LIFO Reserve	3,600	5,100		
Current Assets (FIFO))	37,100	38,700		
Average inventory		29,400		
COGS		59,800		
Current ratio	3.20	3.05	3.24	3.67
Inventory turnover		2.03		1.98
Gross profit margin		35.49%		32.47%
Pretax profit margin		7.01%		4.55%

Both LIFO

Balance sheet adjustments are not possible as beginning inventory can not be valued using LIFO in year 1. For the first year, we do not know when the FIFO valued inventories were bought.

Ratios	Zenab	Faybech
Gross profit margin	33.18%	30.29%
Pretax profit margin	4.70%	2.37%

Hybrid method

	Zenab	Faybech
LIFO COGS	61942.9	53676.7
FIFO average inventory	29400	26300
Inventory turnover	2.11	2.04

- D.** Balance sheet values are most meaningful when FIFO is used
Income statement values are most useful when LIFO is used.

For	Use
Current ratios	FIFO
Profitability ratios	LIFO
Inventory turnover ratio	Hybrid method