Unit 4 IP Model Problem

LLK Company reported the following January purchases and sales data for its only product.

Date	Activities	Units Acquired at Cost		Units sold at Retail	
Jan. 1	Beginning inventory	200 units @ $7.00 =	$1,400		
Jan. 10	Sales			160 units @ $18.00 =	$2,880
Jan. 20	Purchase	150 units @ $6.80 =	1,020		
Jan. 25	Sales			100 units @ $18.00 =	$1,800
Jan. 30	Purchase	160 units @ $5.90 =	944		
		510 units	$3,364	260 units	$4,680

LLK uses a perpetual inventory system. Determine the cost assigned to cost of goods sold using specific identification, weighted average, FIFO, and LIFO.

Reminder: Cost of Goods Sold is found by the following formula:
Beginning Inventory + Purchases = Cost of Goods Available for Sale – Ending Inventory = Cost of Goods Sold

Date	Activities	Units Acquired at Cost		Units sold at Retail	
Jan. 1	Beginning inventory	200 units @ $7.00 =	$1,400		
Jan. 10	Sales			160 units @ $18.00 =	$2,880
Jan. 20	Purchase	150 units @ $6.80 =	1,020		
Jan. 25	Sales			100 units @ $18.00 =	$1,800
Jan. 30	Purchase	160 units @ $5.90 =	944		
		510 units	$3,364	260 units	$4,680

For specific identification, ending inventory consists of 250 units, where 160 are from the January 30 purchase, 70 are from the January 20 purchase, and 20 are from beginning inventory.

1. Determine the cost assigned to ending inventory and to cost of goods sold using specific identification.

Available for Sale				Cost of Goods Sold			Ending Inventory		
Date	Activity	Units	Unit Cost	Units Sold	Unit Cost	COGS	Ending Inventory Units	Cost per Unit	Ending Inventory Cost
Jan. 1	Beg. Inv.	200	$7.00	180	$7.00	$1,260	20	$7.00	$140
Jan. 20	Purchase	150	$6.80	80	$6.80	544	70	$6.80	476
Jan. 30	Purchase	160	$5.90	0	$5.90	0	160	$5.90	944
Total				260		$1,804	250		$1,560

Beginning inventory	$1,400
Purchases	1,964
Cost of goods available for sale	3,364
Ending inventory	(1,560)
Cost of goods sold	$1,804

Date	Activities	Units Acquired at Cost		Units sold at Retail	
Jan. 1	Beginning inventory	200 units @ $7.00 =	$1,400		
Jan. 10	Sales			160 units @ $18.00 =	$2,880
Jan. 20	Purchase	150 units @ $6.80 =	1,020		
Jan. 25	Sales			100 units @ $18.00 =	$1,800
Jan. 30	Purchase	160 units @ $5.90 =	944		
		510 units	$3,364	260 units	$4,680

2. Determine the cost assigned to ending inventory and to cost of goods sold using perpetual FIFO.

Goods purchased			Cost of Goods Sold			Ending Inventory		
Date	Units	Unit Cost	Units Sold	Unit Cost	COGS	# of units	Unit Cost	Inventory Balance
Jan. 1	200	$7.00				200	$7.00	$1,400.00
Jan. 10			160	$7.00	$1,120.00	40	$7.00	280.00
Jan. 20	150	$6.80				40	$7.00	280.00
						150	$6.80	1,020.00
						190		1,300.00
Jan. 25			40	$7.00	280.00	0	$7.00	0.00
			60	$6.80	408.00	90	$6.80	612.00
					688.00	90		612.00
Jan. 30	160	$5.90				0	$7.00	0.00
						90	$6.80	612.00
						160	$5.90	944.00
Total					$1,808.00	250		$1,556.00

Beginning Inventory	$1,400.00
Purchases	1,964.00
Cost of goods available for sale	3,364.00
Ending inventory	(1,556.00)
Cost of goods sold	$1,808.00

Date	Activities	Units Acquired at Cost		Units sold at Retail	
Jan. 1	Beginning inventory	200 units @ $7.00 =	$1,400		
Jan. 10	Sales			160 units @ $18.00 = $2,880	
Jan. 20	Purchase	150 units @ $6.80 =	1,020		
Jan. 25	Sales			100 units @ $18.00 = $1,800	
Jan. 30	Purchase	160 units @ $5.90 =	944		
		510 units	$3,364	260 units	$4,680

3. Determine the cost assigned to ending inventory and to cost of goods sold using perpetual LIFO.

Goods purchased			Cost of Goods Sold			Ending Inventory		
Date	Units	Unit Cost	Units Sold	Unit Cost	COGS	# of units	Unit Cost	Inventory Balance
Jan. 1	200	$7.00				200	$7.00	$1,400.00
Jan. 10			160	$7.00	$1,120.00	40	$7.00	280.00
Jan. 20	150	$6.80				40	$7.00	280.00
						150	$6.80	1,020.00
						190		1,300.00
Jan. 25						40	$7.00	280.00
			100	$6.80	680.00	50	$6.80	340.00
						90		620.00
Jan. 30	160	$5.90				40	$7.00	280.00
						50	$6.80	340.00
						160	$5.90	944.00
Total					$1,800.00	250		$1,564.00

Beginning Inventory	$1,400.00
Purchases	1,964.00
Cost of goods available for sale	3,364.00
Ending inventory	(1,564.00)
Cost of goods sold	$1,800.00