
Problem Set 7 Process Costing

Problem 1 (GNBv14; 4:2;4a-1)

Lindex Company uses a process costing system. The following data are available for one department for October:

	Units	<u>Percent Completed</u>	
		Materials	Conversion
Work in Process, October 1	50,000	90%	60%
Work in Process, October 31	30,000	70%	50%

The department started 390,000 units into production during the month and transferred 410,000 completed units to the next department.

Compute the equivalent units of production for October, assuming that the company uses the FIFO method of accounting for units and costs.

Compute the equivalent units of production for October, assuming that the company uses the weighted-average method of accounting for units and costs.

PROBLEM 1 Solution

FIFO Method

	<i>Materials</i>	<i>Conversion</i>
To complete beginning work in process:		
Materials: 50,000 units \times (100% – 90%).....	5,000	
Conversion: 50,000 units \times (100% – 60%)....		20,000
Units started and completed during October*	360,000	360,000
Ending work in process:		
Materials: 30,000 units \times 70% complete	21,000	
Conversion: 30,000 units \times 50% complete		<u>15,000</u>
Equivalent units of production	<u>386,000</u>	<u>395,000</u>

* 390,000 units started into production – 30,000 units in ending work in process = 360,000 units started and completed

Weighted-Average Method

	<u><i>Equivalent Units</i></u>	
	<i>Materials</i>	<i>Conversion</i>
Units transferred out	410,000	410,000
Work in process, ending:		
30,000 units \times 70%	21,000	
30,000 units \times 50%		<u>15,000</u>
Equivalent units of production	<u>431,000</u>	<u>425,000</u>

Problem 2 (GNBv14; 4:6;4a-7)

Kalox, Inc. manufactures an antacid product that passes through two departments. Data for May for the first department follow:

	Gallons	Materials	Labor	Overhead
Work in Process, May 1	80,000	\$68,600	\$30,000	\$48,000
Gallons started in process	760,000			
Gallons transferred out	790,000			
Work in Process, May 31	50,000			
Cost added during May		\$907,200	\$370,000	\$592,000

The beginning work in process inventory was 80% complete with respect to materials and 75% complete with respect to labor and overhead. The ending work in process inventory was 60% complete with respect to materials and 20% complete with respect to labor and overhead.

Assuming that the company uses the FIFO method of accounting for units and costs, compute the equivalent units for May's activity in the first department.

Assuming that the company uses the FIFO method of accounting for units and costs, determine the costs per equivalent unit for May.

Assuming that the company uses the weighted-average method of accounting for units and costs, compute the equivalent units for May's activity in the first department.

Assuming that the company uses the weighted-average method of accounting for units and costs, determine the costs per equivalent unit for May.