

Exercise 6.17

FIFO Method, Valuation of Goods Transferred Out and Ending Work in Process

K-Briggs Company uses the FIFO method to account for the costs of production. For Crushing, the first processing department, the following equivalent units schedule has been prepared:

	<u>Direct Materials</u>	<u>Conversion Costs</u>	Beginning
Units started and completed	28,000	28,000	Started
Units, beginning work in process:			COGA
10,000 × 0%	-	-	(Ending)
10,000 × 40%	-	4,000	Transferred
Units, ending work in process:			
6,000 × 100%	6,000	-	
6,000 × 75%	-	4,500	
Equivalent units of output	<u>34,000</u>	<u>36,500</u>	

The cost per equivalent unit for the period was as follows:

Direct materials	\$ 2.00	34,000	68,000
Conversion costs	\$ 6.00	36,500	219,000
Total	<u>\$ 8.00</u>		

The cost of beginning work in process was direct materials, \$40,000; conversion costs, \$30,000.

Required:

1. Determine the cost of ending work in process.

	<u>Direct Materials</u>	<u>Conversion Costs</u>
\$ 39,000	6,000	4,500
	<u>\$ 2.00</u>	<u>\$ 6.00</u>
	\$ 12,000	27,000

Determine the cost of goods transferred out.

	28,000	28,000
		<u>4,000</u>
	28,000	32,000
	<u>\$ 2.00</u>	<u>\$ 6.00</u>
\$ 248,000	\$ 56,000	\$ 192,000
\$ 70,000	\$ 40,000	\$ 30,000
\$ 318,000		

What is the flow of products?

	<u>Product</u>
Beginning	10,000
Started and Completed	28,000
Ending	<u>6,000</u>
Total to Account for	44,000
Beginning	10,000
Started	34,000

Total to Account for	44,000
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10,000

28,000

38,000

6,000

32,000

Exercise 6.20

Weighted Average Method, Unit Cost, Valuation of Goods Transferred Out and Ending Work in Process

Holmes Products, Inc., produces plastic cases used for video cameras. The product passes through three departments. For April, the following equivalent units schedule was prepared for the first department:

	<u>Direct Materials</u>	<u>Conversion Costs</u>		
Units Completed	25,000	25,000	Beginning	0
Ending WIP			Purchase	33,000
8,000 100%	8,000		CoFGA	33,000
8,000 50%		4,000	(ending)	8,000
Equivalent Units of Production	<u>33,000</u>	<u>29,000</u>	Transferred	25,000

Costs assigned to beginning work in process: direct materials, \$90,000; conversion costs, \$33,750. Manufacturing costs incurred during April: direct materials, \$75,000; conversion costs, \$220,000. Holmes uses the weighted average method.

Required:

1. Compute the unit cost for April. If required, round your answers to the nearest cent.

	<u>Direct Materials</u>	<u>Conversion Costs</u>	<u>Total</u>
Beginning	\$ 90,000	\$ 33,750	\$ 123,750
April Costs	\$ 75,000	\$ 220,000	\$ 295,000
Total Costs for April	<u>\$ 165,000</u>	<u>\$ 253,750</u>	<u>\$ 418,750</u>
EUP	<u>33,000</u>	<u>29,000</u>	
Cost per Unit	\$ 5.00	\$ 8.75	\$ 13.75

2. Determine the cost of ending work in process and the cost of goods transferred out.

Cost of ending work in process

	<u>Direct Materials</u>	<u>Conversion Costs</u>	
	40,000	\$ 35,000	75,000
Cost of goods transferred out	25,000	\$ 13.75	\$ 343,750

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Exercise 6.23

FIFO Method, Equivalent Units, Unit Cost, Multiple Departments

Fordman Company has a product that passes through two processes: Grinding and Polishing. During December, the Grinding Department transferred 20,000 units to the Polishing Department. The cost of the units transferred into the second department was \$40,000. Direct materials are added uniformly in the second process. Units are measured the same way in both departments.

The second department (Polishing) had the following physical flow schedule for December:

Units to account for

Beginning	4,000	40% complete	Beg
Units Started	20,000		Started
Total to account for	24,000		CoFGA
			(Ending)
Ending WIP	8,000	50% complete	Transferred
Units Completed	16,000		
Total to account for	24,000		

Costs in beginning work in process for the Polishing Department were direct materials, \$5,000; conversion costs, \$6,000; and transferred in, \$8,000. Costs added during the month: direct materials, \$32,000; conversion costs, \$50,000; and transferred in, \$40,000.

Assume the company uses the FIFO method.

Required:

1. Prepare a schedule of equivalent units. Enter percentages as whole numbers.

	<u>Direct Materials</u>	<u>Conversion Costs</u>	<u>Transferred</u>
Started and completed	12,000	12,000	12,000
Beginning WIP	2,400	2,400	
Ending WIP	4,000	4,000	4,000
Equivalent Units of Prod	18,400	18,400	16,000
Costs			
Beg Inventory	5,000	6,000	8,000
Added	\$ 32,000	\$ 50,000	\$ 40,000
Cost Per Equivlant Unit	\$ 1.74	\$ 2.72	\$ 2.50
Ending Inventory	\$ 6,956.52	\$ 10,869.57	\$ 10,000.00
Cost of Goods Transferred Out	\$ 14,400.00	\$ 14,400.00	\$ 12,000.00

\$ 25,043.48	\$ 39,130.43	\$ 30,000.00	\$ 94,173.91
<u>\$ 5,000</u>	<u>\$ 6,000</u>	<u>\$ 8,000</u>	\$ 19,000.00
\$ 30,043.48	\$ 45,130.43	38,000	\$ 113,173.91

4,000

20,000

24,000

8,000

16,000