Equivalent Units of Production and Related Costs

The charges to Work in Process—Baking Department for a period as well as information concerning production are as follows. The Baking Department uses the weighted average method, and all direct materials are placed in process during production.

# Work in Process—Baking Department

Bal., 900 units, 40% completed	2,466	To Finished Goods, 8,100 units	?
Direct materials, 8,400 units	34,500		
Direct labor	16,200		
Factory overhead	8,574		
Bal., 1,200 units, 60% completed	?		

a. Determine the number of whole units to be accounted for and to be assigned costs.



9300

units

**b.** Determine the number of equivalent units of production.



8820

units

c. Determine the cost per equivalent unit.



7.00

per equivalent unit

d. Determine the cost of units transferred to Finished Goods.



56700

e. Determine the cost of units in ending Work in Process.



5040

#### Feedback

### Check My Work

How many units were started during the current period? How many units were complete at the end of the period? How many units were still in work in process? How much in resources had these units in ending work in process consumed during the current period? How will the cost be allocated to the units that were transferred to finished goods and how much of the cost will comprise the ending work in process?

Post-Submission

a. and b.

#### Whole Equivalent

		Production	
Units to be accounted for:			
Beginning work in process	900		
Units started during the period	8,400	_	
Total	9,300	<u>-</u>	
Units to be assigned costs:		<u>.</u>	
Transferred to finished goods	8,100	8,100	
Inventory in process, ending	1,200	720*	
Total units	9,300	8,820	

Units

Units of

C.

Cost per Equivalent Unit = 
$$\frac{\text{Total Production Costs}}{\text{Total Equivalent Units}}$$
Cost per Equivalent Unit = 
$$\frac{\$61,740*}{8,820 \text{ units}} = \$7.00$$

$$\$\$2,466 + \$34,500 + \$16,200 + \$8,574 = \$61,740$$

- **d.** Cost of units transferred to Finished Goods:  $$56,700 (8,100 \text{ units} \times $7.00)$
- **e.** Cost of units in ending Work in Process: \$5,040 (1,200 units  $\times$  60%  $\times$  \$7.00)

Solution

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**b.** Determine the number of equivalent units of production.

8820 units

c. Determine the cost per equivalent unit.

\$ 7.00 per equivalent unit

**d.** Determine the cost of units transferred to Finished Goods.

\$ 56700

<sup>\*60% × 1,200</sup> units

e. Determine the cost of units in ending Work in Process.

\$ 5040