The Riley Company produces a product by sending it through two processes. one of which takes place in Department A and the other in Department B. All of A's output is transferred to B. In addition to the goods in process inventories in Departments A and B, Riley maintains inventories of raw materials and finished goods. Riley uses its raw materials as direct materials in Departments A and B, and as indirect materials. Its factory payroll costs also include direct labor in each department and indirect labor.

In this problem, you are to maintain certain records and produce various measures of the inventories to reflect the events of March 2016. Round all calculations of Unit costs to the nearest penny and all other dollar amounts to the nearest whole dollar. To begin, set up the following general ledger accounts and enter their February 28 balances:

Raw Materials	\$20,000
Factory Payroll	-0-
Factory Overhead	-0-
Goods in Process-Department A	25,000
Goods in Process-Department E	65,000
Finished Goods	185,000
Cost of Goods Sold	-0-
Sales	-0-

- 1. Prepare summary general journal entries to record the following events during March:
 - a. Purchased raw materials for \$65,000 cash (use a perpetual inventory system).
 - b. Used raw materials as follows:

Department A \$21,760
Department B 46,760
Indirect materials. 5,000

- c. Paid factory payroll cost of \$125,000\$ cash (ignore income and other taxes).
- d. Assigned factory payroll costs as follows:

Department A \$25,420 Direct Labor Department B 60,900 Direct Labor Indirect labor 38,680

- e. Incurred additional factory overhead costs of \$54,725. paid in cash.
- f. Factory overhead is allocated to Departments A and B as a percentage of the direct labor costs. The predetermined overhead rate is 108%.(Adjust any over or under applied overhead to COGS)
- 2. The following information was known about the units of product on hand or worked on during March:

Units In beginning inventory Percent completed with respect	Department A 200	Department B 300
Materials	60%	35%
Labor and overhead	80%	10%
Units started in March	900	700
Units transferred	700	750
Percent completed with respect	to:	
Materials	100%	100%
Labor and overhead	100%	100%
Ending inventory	400	250
Percent completed with respect	to:	
Materials	40%	70%
Labor and overhead	20%	60%

Use this information and the facts from part (1) to make the following calculations:

Equivalent units of production in Department A and the per unit cost for labor, materials, and overhead. (FIFO)

Equivalent units of production in Department B and the per unit cost for labor, materials, and overhead. (FIFO)

- 3. Using the results from part (2) and previously given information, make the following calculations and. prepare general journal entries to record:
 - g. Total cost of units transferred from Department A to Department B during March.
 - h. Total cost of units transferred from Department B to finished goods during March.
 - i. Sale of finished goods that cost \$435,000 for \$970,000 cash.
- 4. As of March 31, 2016, determine the cost of the:

Raw materials inventory Goods in process inventory for Department A Goods in process inventory for Department B Finished goods inventory

- 5. Post the journal entries from parts (I) and (3) to the ledger accounts that you set up at the beginning of the problem. (Note: The ending balances of the inventory accounts should equal the amounts determined in part (4).)
- 6. Compute the amount of gross profit from the sales in March 2015.
- 7. Complete this table by filling in the lettered blanks. The letters
- in parentheses should contain negative numbers.

-	Raw	Factory	Factory	Goods In Process	Goods In Process	Finished
	<u>Materials</u>	Payroll	Overhead	-	Dept. B	<u>Goods</u>
Beginning Inventories	\$20,000			\$25 , 000	\$65 , 000	\$185 , 000
Costs incurred	65 , 000	\$125 , 000	\$54 , 725			
Materials used:						
In Department A	(21 , 760)			E		
In Department B	(46 , 760)				J	
Overhead	(5 , 000)		В			
Labor used:						
In Department A		(25, 420)		F		
In Department B		(60,900)			K	
Overhead		(38,680)	С			
Overhead applied			(D)	G	L	
Transfer from A to B				(H)	М	
Transfer from B					(N)	P
Cost of goods sold						(435,000)
Over/Under applied O.	Н.		R			
Ending inventories	A	\$ -0-	\$ -0-	I	0	Q