17.38 Transferred –in costs, weighted-average method. Publish, Inc. has two departments: Printing and Binding. Each department has one direct-cost category (direct materials) and one indirect-cost category (conversion costs). This problem focuses on the Binding Department. Books that have undergone the printing process are immediately transferred to the Binding Department. Direct material is added when the binding process is 80% complete. Conversion costs are added evenly during binding operations. When those operations are done, the books are immediately transferred to Finished Goods. Publish, Inc. uses the weighted-average method of process costing. The following is a summary of the April 2009 operations of the Binding Department.

Physical Units Transferred-in Direct Conversion

(books) Costs Materials Costs

Beginning work in process 900 $32,775 $0 $15,000

Degree of completion, beginning

work in process 100% 0% 40%

Transferred in during April 2009 2,700

Completed & transferred out

During April 3,000

Ending work in process (April 30) 600

Degree of completion, ending

work in process 100% 0% 60%

Total costs added during April $144,000 $26,700 $69,000

1. Summarize total Binding Department costs for April 2009, and assign these costs to units completed (and transferred out) and to units in ending work in process.

Steps 1 and 2: Summarize Output in Physical Units and Compute Output in Equivalent Units; Weighted-Average Method of Process Costing,

Binding Department of Publish, Inc. for April 2009

(Step 1) (Step 2) Equivalent Units

Physical Transferred- Direct Conversion

Units in Costs Materials Costs

Work in process, beginning (given) 900

Transferred-in during current period 2,700

To account for 3,600

Completed and transferred out

During current period: 3,000 3,000 3,000 3,000

Work in process, ending(a) (given) 600

(600 x 100%; 600x0%; 600x60%) 600 0 360

Accounted for 3,600

Work done to date 3,600 3,000 3,360

(a) Degree of completion in this department: transferred-in costs, 100%; direct materials, 0%; conversion costs, 60%.

Steps 3, 4, and 5: Summarize Total Costs to Account For, Compute Cost per Equivalent Unit, and Assign Total Costs to Units Completed and to Units in Ending Work in Process:

Weighted-Average Method of Process Costing

Binding Department of Publish, Inc. for April 2009.

Total Transferred Direct Conversion

Production in-costs Materials Costs

Costs

(Step 3)

Work in process, beginning $47,775 $32,775 $0 $15,000

Costs added in current period $239,700 $144,000 $26,700 $69,000

Total costs to account for $287,457 $176,775 $26,700 $84,000

(Step 4)

Costs incurred to date $176,775 $26,700 $84,000

Divide by Equiv units of work done

to date (requirement 1) div 3,600 div 3,000 div 3,360

Cost per equivalent unit of work done

to date $49,104 $8.90 $25

(Step 5)

Assignment of costs:

Completed & transferred

out (3,000 units) $249,012 (3000a x 49,104) + (3000ax8.90) + (3000a x 25)

Work in process, ending (6,000 units) 38,463 (600b x 49.104) + (0b x 8.90) + (360b x 25)

Total costs accounted for 287,475 $176,775 $26,700 $84,000

1. Equivalent units completed and transferred out Requirement 1, step 2.
2. Equivalent units in ending work in process from Requirement 1, step 2.
3. Prepare journal entries for April transfers from the Printing Department to the Binding Department and from the Binding Department to Finished Goods.

Journal entries:

1. Work in process – Binding Dept 144,000

Work in Process – Printing Dept 144,000

Cost of goods completed and transferred out during April from the Printing Dept to the Binding Dept.

1. Finished Goods 249,012

Work in Process – Binding Dept 249,012

Cost of goods completed and transferred out during April from the Binding Dept to Finished Goods Inventory.

17.39 Transferred-in costs, FIFO method. Refer to the information in Problem 17.38. Suppose that Publish, Inc. uses the FIFO method instead of the weighted-average method in all of its departments. The only changes to Problem 17.38 under the FIFO method are that total transferred-in costs of beginning work in process on April 1 are $27,855 (instead of $32,775) and that total transferred-in costs added during April are $141,750 (instead of $144,000).

1. Using the FIFO process-costing method, do problem 17.38
2. If you did Problem 17.38, explain any difference between the cost of work completed and transferred out and the cost of ending work in process in the Binding Department under the weighted-average method and the FIFO method.