Requirements

1. Fill in the blanks in both the opening schedule and the list of activities.
2. How is labor cost assigned to products under this ABC product costing system?
3. Why might managers favor this ABC system instead of Alright's older system, which allocated all conversion costs on the basis of direct labor?

P17-26A *(L.OBJ. 1, 2)* **Product costing in an ABC system [20–30 min]**
Allen, Inc., manufactures bookcases and uses an activity-based costing system. Allen's activity areas and related data follow:

Activity	Budgeted Cost of Activity	Allocation Base	Cost Allocation Rate
Materials handling	$ 22,000	Number of parts	$ 0.90
Assembly	3,000,000	Direct labor hours	12.00
Finishing	170,000	Number of finished units	3.90

Allen produced two styles of bookcases in April: the standard bookcase and an unfinished bookcase, which has fewer parts and requires no finishing. The totals for quantities, direct materials costs, and other data follow:

Product	Total Units Produced	Total Direct Materials Costs	Total Number of Parts	Total Assembling Direct Labor Hours
Standard bookcase	2,000	$ 29,600	82,000	3,300
Unfinished bookcase	2,600	28,600	86,000	2,000

Requirements

1. Compute the manufacturing product cost per unit of each type of bookcase.
2. Suppose that premanufacturing activities, such as product design, were assigned to the standard bookcases at $5 each, and to the unfinished bookcases at $4 each. Similar analyses were conducted of postmanufacturing activities such as distribution, marketing, and customer service. The postmanufacturing costs were $21 per standard bookcase and $18 per unfinished bookcase. Compute the full product costs per unit.
3. Which product costs are reported in the external financial statements? Which costs are used for management decision making? Explain the difference.
4. What price should Allen's managers set for unfinished bookcases to earn a unit profit of $19?

P17-27A *(L.OBJ. 1, 2)* **Comparing costs from ABC and single-rate systems [30–40 min]**
Willitte Pharmaceuticals manufactures an over-the-counter allergy medication. The company sells both large commercial containers of 1,000 capsules to health-care facilities and travel packs of 20 capsules to shops in airports, train stations, and hotels. The following information has been developed to determine if an activity-based costing system would be beneficial:

Activity	Estimated Indirect Activity Costs	Allocation Base	Estimated Quantity of Allocation Base
Materials handling	$ 115,000	Kilos	23,000 kilos
Packaging	204,000	Machine hours ..	2,125 hours
Quality assurance	118,000	Samples	2,000 samples
Total indirect costs	$ 437,000		