

5. value:  
10.00 points

Woodland Industries manufactures and sells custom-made windows. Its job costing system was designed using an activity-based costing approach. Direct materials and direct labor costs are accumulated separately, along with information concerning three manufacturing overhead cost drivers (activities). Assume that the direct labor rate is \$18 per hour and that there were no beginning inventories. The following information was available for 2016, based on an expected production level of 52,100 units for the year, which will require 226,000 direct labor hours:

Activity Cost Driver	Budgeted Costs for 2016	Cost Driver Used as Allocation Base	Cost Allocation Rate
Materials handling	\$ 38,420	Number of parts used	\$ 0.17 per part
Cutting and lathe work	2,583,180	Number of parts used	11.43 per part
Assembly and inspection	4,294,000	Direct labor hours	19.00 per hour

The following production, costs, and activities occurred during the month of July:

Units Produced	Direct Materials Costs	Number of Parts Used	Direct Labor Hours
3,200	\$102,700	1,081	13,500

**Required:**

a. Calculate the total manufacturing costs and the cost per unit of the windows produced during the month of July (using the activity-based costing approach). **(Round "Cost per unit produced" to 2 decimal places.)**

Total manufacturing cost	
Cost per unit produced	

b. Assume instead that Woodland Industries applies manufacturing overhead on a direct labor hours basis (rather than using the activity-based costing system previously described). Calculate the total manufacturing cost and the cost per unit of the windows produced during the month of July. (*Hint:* You will need to calculate the predetermined overhead application rate using the total budgeted overhead costs for 2016.) **(Round "Cost per unit produced" to 2 decimal places.)**

Total manufacturing cost	
Cost per unit produced	

c. Which approach do you think provides better information for manufacturing managers?

- Activity based costing  
 Direct labor hours basis

**References**

**eBook & Resources**

**Worksheet**

Difficulty: 2 Medium

Learning Objective: 13-09 Perform activity-based costing and describe activity-based management.

[Check my work](#)

