

The company's expected direct labor-hours during the current year is computed as follows:

	Product S	Product W	Total
Units	60,000	10,000	
Labor Hours	0.50	1.00	
Total	30,000	10,000	40,000

Using these hours as a base, the predetermined overhead using direct labor-hours would be:

Predetermined overhead rate $500,000 \div 40,000 = \$12.50$

Using this overhead rate, the unit product cost of each product would be:

	Product S	Product W
Direct materials		\$24.00
Direct labor	\$10.00	\$12.00
Manufacturing overhead:	0.50	1.00
Total unit product cost	\$6.25	\$12.50
	\$24.25	\$48.50

2.) The overhead rates are computed as follows:

Activity Cost Pools	Estimated Overhead Costs	Total Expected Activity	Rate
Machine setups	\$120,000	972	\$123.46 per Machine setups
Purchase orders	\$43,500	672	\$64.73 per Purchase orders
Machine-hours	\$104,000	4,500	\$23.11 per Machine-hours
Maintenance requests	\$152,500	1,400	\$108.93 per Maintenance requests
ABC cost pools	\$420,000		
Non ABC cost pool	\$80,000	40,000	\$2.00 per labor hour

The overhead cost attributable to each product is:

	Product S	Product W
	Activity	Amount
Machine setups	720	\$88,889
Purchase orders	480	\$31,071
Machine-hours	3,000	\$69,333
Maintenance reques	840	\$91,500
Non ABC cost pool	30,000	\$60,000
		\$340,794
Overhead cost per unit:	$\div 60,000$	\$5.68
		10,000
		\$15.92

	Product S	Product W
Direct materials		\$24.00
Direct labor	\$10.00	\$12.00
Manufacturing overhead:	\$5.68	0.00
Total unit product cost	\$23.68	\$15.92

3)

	Product S	Product W
Components handled per unit	10	50
total	1,100,000	600,000
Proportion	55%	45%

Since this proportion for product S is less than the proportion of any other activity in Q2, if costs are assigned to a materials handling pool, the cost of product S will be lower.