506.

**TB 06-01 Departmental overhead rates applied on the basis o...**
Departmental overhead rates applied on the basis of a volume measure such as direct labour-hours or machine-hours will eliminate any distortions in unit costs due to product diversity.

- True
- False

507.

**TB 06-02 An activity-based costing system is generally easi...**
An activity-based costing system is generally easier to set up and run than a traditional cost system.

- True
- False

508.

**TB 06-03 Activity-based management involves focusing on act...**
Activity-based management involves focusing on activities to eliminate waste.

- True
- False
509.

*TB 06-04 Activity-based costing uses a number of activity c...*

Activity-based costing uses a number of activity cost pools, each of which is allocated to products on the basis of direct labour-hours.

- True
- False

**True / False**  
*TB 06-04 Activity-based costing uses a number of activity c...*

510.

*TB 06-05 In activity-based costing, a plantwide overhead ra...*

In activity-based costing, a plantwide overhead rate is used to apply overhead to products.

- True
- False

**True / False**  
*TB 06-05 In activity-based costing, a plantwide overhead ra...*

511.

*TB 06-06 Unit-level activities are performed each time a un...*

Unit-level activities are performed each time a unit is made.

- True
- False

**True / False**  
*TB 06-06 Unit-level activities are performed each time a un...*
512.

**TB 06-07 Batch-level activities are performed each time a b...**
Batch-level activities are performed each time a batch is handled or processed, regardless of how many units are in the batch.

→ True
→ False

<table>
<thead>
<tr>
<th>True / False</th>
<th>TB 06-07 Batch-level activities are performed each time a b...</th>
</tr>
</thead>
</table>

513.

**TB 06-08 Predetermined activity rates in activity-based cos...**
Predetermined activity rates in activity-based costing are computed by dividing estimated activity costs by the estimated activity volume for each activity cost pool.

→ True
→ False

<table>
<thead>
<tr>
<th>True / False</th>
<th>TB 06-08 Predetermined activity rates in activity-based cos...</th>
</tr>
</thead>
</table>

514.

**TB 06-09 When there are batch-level or product-level costs,...**
When there are batch-level or product-level costs, in comparison to a traditional cost system, an activity-based costing system ordinarily will shift costs from high-volume to low-volume products.

→ True
→ False

| True / False | TB 06-09 When there are batch-level or product-level costs,... |
TB 06-10 When activity-based costing is used, the flow of costs through the accounts is similar to a system using one
plantwide overhead application rate other than the overhead costs are applied using multiple predetermined
overhead rates.

→ True
○ False

TB 06-11 Using activity-based costing is not useful in determining costs of quality.

○ True
→ False

TB 06-12 In the initial stages of a quality improvement process, there usually will be immediate reductions in total quality
costs.

○ True
→ False

TB 06-13 In the initial stages of a quality improvement process, there usually will be immediate reductions in total quality
costs.
518.  

**TB 06-13 Facility-level costs can be easily and accurately ...**  
Facility-level costs can be easily and accurately allocated to different products using activity-based costing.  

- True  
- False

**True / False**

519.  

**TB 06-14 Activity-based costing is only useful in allocating ...**  
Activity-based costing is only useful in allocating manufacturing overhead costs.  

- True  
- False

**True / False**

520.  

**TB 06-15 Purchase order processing is an example of a:**  
Purchase order processing is an example of a:  

- unit-level activity.  
- batch-level activity.  
- product-level activity.  
- facility-level activity.

**Multiple Choice**
521.

**TB 06-16 Departmental overhead rates may not correctly assign overhead costs due to:**
- the use of direct labour-hours in allocating overhead costs to products rather than machine time or quantity of materials used.
- the high correlation between direct labour-hours and the incurrence of overhead costs.
- overreliance on volume as a basis for allocating overhead costs where products differ regarding the number of units produced, lot size, or complexity of production.
- difficulties associated with identifying cost pools for the first stage of the allocation process.

522.

**TB 06-17 Human resource management is an example of an activity at which of the following levels?**
- Unit-level activity.
- Product-level activity.
- Batch-level activity.
- Facility-level activity.

523.

**TB 06-18 Which of the following would be classified as a product-level activity?**
- Machine setup for a batch of a standard product.
- Cafeteria facilities available to and used by all employees.
- Human resource management.
- Advertising a product.
524.

TB 06-19 Testing a prototype of a new product is an example... Testing a prototype of a new product is an example of a:

- unit-level activity.
- batch-level activity.
- product-level activity.
- facility-level activity.

Multiple Choice

525.

TB 06-20 Setting up equipment is an example of a: Setting up equipment is an example of a:

- unit-level activity.
- batch-level activity.
- product-level activity.
- facility-level activity.

Multiple Choice

526.

TB 06-21 The clerical activity associated with processing p... The clerical activity associated with processing purchase orders to produce an order for a standard product is an example of a:

- unit-level activity.
- batch-level activity.
- product-level activity.
- facility-level activity.

Multiple Choice
527.

**TB 06-22** Parts administration is an example of a:

- unit-level activity.
- batch-level activity.
- product-level activity.
- facility-level activity.

Multiple Choice

528.

**TB 06-23** The cost of worker recreational facilities is an example of a cost that would ordinarily be considered to be

- unit-level.
- batch-level.
- product-level.
- facility-level.

Multiple Choice

529.

**TB 06-24** Overhead allocation based on volume alone:

- is a key aspect of the activity-based costing model.
- will systematically overcost high-volume products and undercost low-volume products.
- will systematically overcost low-volume products and undercost high-volume products.
- must be used for external financial reporting.

Multiple Choice
Matt Company uses activity-based costing. The company has two products: A and B. The annual production and sales of Product A are 8,000 units and of Product B are 6,000 units. There are three activity cost pools, with estimated total cost and expected activity as follows:

<table>
<thead>
<tr>
<th>Activity Cost Pool</th>
<th>Estimated Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$20,000</td>
<td>Product A 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product B 400</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$37,000</td>
<td>Product A 800</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product B 200</td>
</tr>
<tr>
<td>Activity 3</td>
<td>$91,200</td>
<td>Product A 800</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product B 3,000</td>
</tr>
<tr>
<td>To</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The cost per unit of Product A under activity-based costing is closest to:

- $2.40.
- $3.90.
- $6.60.
- $10.59.

Multiple Choice

TB 06-25 Matt Company uses activity-based costing. The comp...
Bridget Company uses activity-based costing. The company has two products: A and B. The annual production and sales of Product A are 2,000 units and of Product B are 3,000 units. There are three activity cost pools, with estimated total cost and expected activity as follows:

<table>
<thead>
<tr>
<th>Activity Cost Pool</th>
<th>Estimated Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$9,000</td>
<td>Product A: 400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product B: 350</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$12,000</td>
<td>Product A: 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product B: 400</td>
</tr>
<tr>
<td>Activity 3</td>
<td>$48,000</td>
<td>Product A: 400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product B: 1,200</td>
</tr>
</tbody>
</table>

The cost per unit of Product A under activity-based costing is closest to:

- $6.40.
- $8.63.
- $9.60.
- $13.80.

Multiple Choice

TB 06-26 Bridget Company uses activity-based costing. The c...
Westin Company uses activity-based costing to compute product costs for external reports. The company has three activity cost pools and applies overhead using predetermined overhead rates for each activity cost pool. Estimated costs and activities for the current year are presented below for the three activity cost pools:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Estimated Overhead Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$11,916</td>
<td>900</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$12,360</td>
<td>1,200</td>
</tr>
<tr>
<td>Activity 3</td>
<td>$19,950</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Actual activity for the current year was as follows:

The amount of overhead applied for Activity 2 during the year was closest to:

- $12,205.50.
- $12,360.00.
- $12,460.00.
- $16,905.75.
Suki Company uses activity-based costing to compute product costs for external reports. The company has three activity cost pools and applies overhead using predetermined overhead rates for each activity cost pool. Estimated costs and activities for the current year are presented below for the three activity cost pools:

Actual activity for the current year was as follows:

<table>
<thead>
<tr>
<th>Activity 1</th>
<th>Activity 2</th>
<th>Activity 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,415</td>
<td>1,805</td>
<td>1,585</td>
</tr>
</tbody>
</table>

The amount of overhead applied for Activity 3 during the year was closest to

- $30,026.50.
- $35,773.45.
- $36,107.00.
- $36,112.00.

Multiple Choice

TB 06-28 Suki Company uses activity-based costing to compute...
Paul Company has two products: A and B. The company uses activity-based costing. The estimated total cost and expected activity for each of the company's three activity cost pools are as follows:

<table>
<thead>
<tr>
<th>Activity Cost Pool</th>
<th>Estimated Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$22,000</td>
<td>Product A: 400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product B: 100</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$16,240</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 3</td>
<td>$14,600</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total: 500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The activity rate under the activity-based costing system for Activity 3 is closest to:

- $19.47.
- $28.87.
- $58.40.
- $70.45.

Multiple Choice

Selena Company has two products: A and B. The company uses activity-based costing. The estimated total cost and expected activity for each of the company's three activity cost pools are as follows:

<table>
<thead>
<tr>
<th>Activity Cost Pool</th>
<th>Estimated Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$22,000</td>
<td>Product A: 400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product B: 100</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$16,240</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 3</td>
<td>$14,600</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total: 500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The activity rate under the activity-based costing system for Activity 3 is closest to:

- $18.53.
- $21.67.
- $46.33.
- $65.00.

Multiple Choice
Acton Company has two products: A and B. The annual production and sales of Product A are 800 units and of Product B are 500 units. The company has traditionally used direct labour-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.3 direct labour-hours per unit and Product B requires 0.2 direct labour-hours per unit. The total estimated overhead for next period is $92,023.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools—Activity 1, Activity 2, and General Factory—with estimated overhead costs and expected activity as follows:

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labour-hours.)

Section Break

TB 06-31 The predetermined overhead rate per DLH under the traditional costing system is closest to:

- $13.17.
- $21.60.
- $37.46.
- $270.66.

Multiple Choice

TB 06-32 The overhead cost per unit of Product B under the traditional costing system is closest to:

- $2.63.
- $4.32.
- $7.49.
- $54.13.
538.

**TB 06-33 The predetermined overhead rate (i.e., activity rate)**
The predetermined overhead rate (i.e., activity rate) for Activity 1 under the activity-based costing system is closest to:

- $13.17.
- $24.15.
- $28.97.
- $83.66.

Multiple Choice

539.

**TB 06-34 The overhead cost per unit of Product A under the activity-based costing system**
The overhead cost per unit of Product A under the activity-based costing system is closest to:

- $70.79.
- $81.20.
- $86.97.

Multiple Choice

Addy Company has two products: A and B. The annual production and sales of Product A are 1,700 units and of Product B are 1,100 units. The company has traditionally used direct labour-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.3 direct labour-hours per unit and Product B requires 0.6 direct labour-hours per unit. The total estimated overhead for next period is $98,785.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools—Activity 1, Activity 2, and General Factory—with estimated overhead costs and expected activity as follows:

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labour-hours.)
540.

TB 06-35 The predetermined overhead rate per DLH under the ... 
The predetermined overhead rate per DLH under the traditional costing system is closest to:

- $9.15.
- $19.08.
- $43.48.
- $84.43.

Multiple Choice

541.

TB 06-36 The overhead cost per unit of Product B under the ... 
The overhead cost per unit of Product B under the traditional costing system is closest to:

- $5.49.
- $11.45.
- $26.09.
- $50.66.

Multiple Choice

542.

TB 06-37 The predetermined overhead rate (i.e., activity ra... 
The predetermined overhead rate (i.e., activity rate) for Activity 2 under the activity-based costing system is closest to:

- $9.15.
- $10.23.
- $51.99.
- $86.93.

Multiple Choice
The overhead cost per unit of Product B under the activity-based costing system is closest to:

- $26.09.
- $35.28.
- $38.16. \(\textbf{\checkmark}\)
- $50.66.

Arthur Company has two products: S and D. The company uses activity-based costing and has prepared the following analysis showing the estimated total cost and expected activity for each of its three activity cost pools:

The annual production and sales of Product S is 4,547 units. The annual production and sales of Product D is 7,913.

The activity rate under the activity-based costing system for Activity 3 is closest to:

- $29.32.
- $30.00.
- $33.33.
- $41.53. \(\textbf{\checkmark}\)
The overhead cost per unit of Product S under activity-based costing is closest to:

- $1.83.
- $1.98.
- $5.00.
- $10.00.

Monson Company has two products: G and P. The company uses activity-based costing and has prepared the following analysis showing the estimated total cost and expected activity for each of its three activity cost pools:

<table>
<thead>
<tr>
<th>Activity Cost Pool</th>
<th>Estimated Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$30,000</td>
<td>200</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$24,000</td>
<td>600</td>
</tr>
<tr>
<td>Activity 3</td>
<td>$80,000</td>
<td>400</td>
</tr>
</tbody>
</table>

The annual production and sales of Product G is 10,640 units. The annual production and sales of Product P is 26,600.
546.

TB 06-41 The activity rate under the activity-based costing...
The activity rate under the activity-based costing system for Activity 2 is closest to:

- $16.00.
- $21.97.
- $26.67.
- $89.33.

Multiple Choice

547.

TB 06-42 The overhead cost per unit of Product P under acti...
The overhead cost per unit of Product P under activity-based costing is closest to:

- $4.00.
- $6.88.
- $10.00.
- $30.16.

Multiple Choice

Abel Company uses activity-based costing. The company has two products: A and B. The annual production and sales of Product A are 200 units and of Product B are 400 units. There are three activity cost pools, with estimated costs and expected activity as follows:

Picture

Section Break
548.

**TB 06-43 The activity rate for Activity 2 is closest to**
The activity rate for Activity 2 is closest to:

- $10.25.
- $16.77.
- $24.91.
- $26.36.

---

**549.**

**TB 06-44 The overhead cost per unit of Product B is closest...**
The overhead cost per unit of Product B is closest to:

- $17.69.
- $41.58.
- $74.73.
- $81.53.

---
Accola Company uses activity-based costing. The company has two products: A and B. The annual production and sales of Product A are 1,100 units and of Product B are 700 units. There are three activity cost pools, with estimated costs and expected activity as follows:

<table>
<thead>
<tr>
<th>Activity Cost Pool</th>
<th>Estimated Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$18,271</td>
<td>600</td>
</tr>
<tr>
<td>2</td>
<td>$35,891</td>
<td>1,600</td>
</tr>
<tr>
<td>3</td>
<td>$48,796</td>
<td>440</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost</th>
<th>Product A</th>
<th>Product B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$18,271</td>
<td>600</td>
<td>500</td>
<td>1,100</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$35,891</td>
<td>1,600</td>
<td>300</td>
<td>1,900</td>
</tr>
<tr>
<td>Activity 3</td>
<td>$48,796</td>
<td>440</td>
<td>420</td>
<td>860</td>
</tr>
</tbody>
</table>

**550.**

**TB 06-45 The activity rate for Activity 3 is closest to:**

The activity rate for Activity 3 is closest to:

- $26.67.
- $56.74.
- $116.18.
- $119.72.
The overhead cost per unit of Product A is closest to:

- $22.70.
- $47.89.
- $57.20.
- $59.23.

### Alam Company uses activity-based costing to compute product costs for external reports.

Alam Company uses activity-based costing to compute product costs for external reports. The company has three activity cost pools and applies overhead using predetermined overhead rates for each activity cost pool. Overapplied or underapplied overhead is closed to the Cost of Goods Sold account at the end of each year. Estimated costs and activities for the current year are presented below for the three activity cost pools:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Estimated Overhead Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$29,328</td>
<td>1,200</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$30,024</td>
<td>2,400</td>
</tr>
<tr>
<td>Activity 3</td>
<td>$65,142</td>
<td>2,200</td>
</tr>
</tbody>
</table>

Actual costs and activities for the current year were as follows:

Picture
552.

**TB 06-47 The total debits to the Manufacturing Overhead account during the year were closest to:**

- $124,254.
- $124,494.
- $125,055.
- $125,667.

Multiple Choice  TB 06-47 The total debits to the Manufacturing Overhead account during the year were closest to:

553.

**TB 06-48 The total credits to the Manufacturing Overhead account during the year were closest to:**

- $124,254.
- $124,494.
- $125,055.
- $125,667.

Multiple Choice  TB 06-48 The total credits to the Manufacturing Overhead account during the year were closest to:

554.

**TB 06-49 The entry to the Cost of Goods Sold account at the end of the year was (round your final answer to nearest dollar value):**

- $801 credit.
- $801 debit.
- $1,173 credit.
- $1,173 debit.

Multiple Choice  TB 06-49 The entry to the Cost of Goods Sold account at the end of the year was (round your final answer to nearest dollar value):
Albin Company uses activity-based costing to compute product costs for external reports. The company has three activity cost pools and applies overhead using predetermined overhead rates for each activity cost pool. Estimated costs and activities for the current year are presented below for the three activity cost pools:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Estimated Overhead Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>$42,700</td>
<td>2,000</td>
</tr>
<tr>
<td>Activity 2</td>
<td>$24,934</td>
<td>2,600</td>
</tr>
<tr>
<td>Activity 3</td>
<td>$49,289</td>
<td>2,300</td>
</tr>
</tbody>
</table>

Actual costs and activities for the current year were as follows:

TB 06-50 The total debits to the Manufacturing Overhead account during the year were closest to:

- $116,661.
- $116,923.
- $116,943.
- $120,133.
556.

**TB 06-51 The total credits to the Manufacturing Overhead account during the year were closest to:**

- $116,661.
- $116,923.
- $116,943.
- $120,133.

---

**Aujla Corporation uses activity-based costing to determine product costs for external financial reports.**

Aujla Corporation uses activity-based costing to determine product costs for external financial reports. The company has provided the following data concerning its activity-based costing system:

---

**TB 06-52 The activity rate for the batch setup activity cost pool is closest to:**

- $26.10.
- $29.40.
- $70.40.
- $234.90.

---
558.

Assuming that actual activity turns out to be the same as expected activity, the total amount of overhead cost allocated to Product X would be closest to:

- $235,000.
- $316,600.
- $357,500.
- $563,000.

Multiple Choice

559.

The activity rate for the batch setup activity cost pool is closest to:

- $39.10.
- $68.40.
- $77.90.
- $91.20.

Multiple Choice
560.

**TB 06-55 Assuming that actual activity turns out to be the ...**
Assuming that actual activity turns out to be the same as expected activity, the total amount of overhead cost allocated to Product X would be closest to:

- $196,800.
- $234,000.
- $272,600.
- $274,000.

**Multiple Choice**

---

561.

**TB 06-56 The activity rate for the batch setup activity cost...**
The activity rate for the batch setup activity cost pool is closest to:

- $33.90.
- $56.50.
- $74.50.
- $84.80.

**Multiple Choice**

---

Andruschack Corporation uses activity-based costin...
Andruschack Corporation uses activity-based costing to determine product costs for external financial reports. Overapplied or underapplied overhead is closed to the Cost of Goods Sold account at the end of each year. The company has provided the following data concerning its activity-based costing system:

---

**Section Break**

Andruschack Corporation uses activity-based costin...
562.

Assuming that actual activity turns out to be the same as expected activity, the total amount of overhead cost allocated to Product X would be closest to:

- $296,100.
- $298,000.
- $339,000.
- $372,600.

563.

Assuming that the actual overhead costs of the three pools totalled $746,000 and actual activity was equal to expected activity, what would be the required entry to the Cost of Goods Sold account?

- $600 credit.
- $600 debit
- $800 credit.
- $800 debit.
Brenot Corporation uses activity-based costing to determine product costs for external financial reports. Activity rates computed at the beginning of the year are used to apply manufacturing overhead costs to products. The company has provided the following data concerning its activity-based costing system. The data used to develop activity rates were:

<table>
<thead>
<tr>
<th>Activity Cost Pools</th>
<th>Estimated Overhead Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine related (machine-hours)</td>
<td>$379,600</td>
<td>13,000 MHs</td>
</tr>
<tr>
<td>Batch setup (setups)</td>
<td>$1,144,800</td>
<td>27,000 setups</td>
</tr>
<tr>
<td>General factory (direct labour-hours)</td>
<td>$420,500</td>
<td>29,000 DLHs</td>
</tr>
</tbody>
</table>

The actual activity for the year was:

<table>
<thead>
<tr>
<th>Activity Cost Pools</th>
<th>Actual Activity for the Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine related (machine-hours)</td>
<td>Total 13,000 Product X 11,000 Product Y 2,000</td>
</tr>
<tr>
<td>Batch setup (setups)</td>
<td>26,000 3,000 23,000</td>
</tr>
<tr>
<td>General factory (direct labour-hours)</td>
<td>30,000 24,000 6,000</td>
</tr>
</tbody>
</table>

The actual total manufacturing overhead cost incurred for the year was $1,942,300.
TB 06-59 The activity rate computed at the beginning of the year for the batch setup activity cost pool is closest to:

- $42.40.
- $49.80.
- $74.80.
- $381.60.

Multiple Choice

TB 06-60 The total amount of overhead cost allocated to Product X during the year would be closest to:

- $224,000.
- $796,400.
- $972,450.
- $1,145,000.

Multiple Choice

TB 06-61 The credits to the Manufacturing Overhead control account during the year (prior to closing out the balance) would have totalled:

- $1,917,000.
- $1,929,650.
- $1,932,300.
- $1,942,300.

Multiple Choice
567.

**TB 06-62 The debits to the Manufacturing Overhead control account during the year (prior to closing out the balance) would have totalled:**

- $1,917,000.
- $1,929,650.
- $1,932,200.
- $1,942,300.

Multiple Choice

568.

**TB 06-63 The activity rate computed at the beginning of the year for the batch setup activity cost pool is closest to:**

- $54.50.
- $71.80.
- $74.00.
- $197.60.

Multiple Choice
TB 06-64 The total amount of overhead cost allocated to Product X during the year would be closest to:

- $1,209,450.
- $1,573,800.
- $1,580,000.
- $1,628,000.

Multiple Choice

TB 06-65 The credits to the Manufacturing Overhead control account during the year (prior to closing out the balance) would have totalled:

- $2,202,600.
- $2,218,050.
- $2,233,500.
- $2,249,700.

Multiple Choice

TB 06-66 The debits to the Manufacturing Overhead control account during the year (prior to closing out the balance) would have totalled:

- $2,202,600.
- $2,218,050.
- $2,223,500.
- $2,249,700.

Multiple Choice
The manufacturing overhead for the year is underapplied or overapplied by:

- $(15,450)$.
- $15,450$.
- $30,900$.
- $(30,900)$.

---

Brooke Corporation uses activity-based costing to determine product costs for external financial reports. Activity rates computed at the beginning of the year are used to apply manufacturing overhead costs to products. The company has provided the following data concerning its activity-based costing system.

The actual activity for the year was:

<table>
<thead>
<tr>
<th>Activity Cost Pools</th>
<th>Total</th>
<th>Product X</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine related (machine-hours)</td>
<td>28,000</td>
<td>17,000</td>
<td>11,000</td>
</tr>
<tr>
<td>Batch setup (setups)</td>
<td>28,000</td>
<td>7,000</td>
<td>21,000</td>
</tr>
<tr>
<td>General factory (direct labour-hours)</td>
<td>18,000</td>
<td>9,000</td>
<td>9,000</td>
</tr>
</tbody>
</table>

The actual total manufacturing overhead cost incurred for the year was $3,064,400.
573.

TB 06-68 The activity rate computed at the beginning of the year for the batch setup activity cost pool is closest to:

- $64.80.
- $86.40.
- $109.70.
- $259.20.

Multiple Choice

574.

TB 06-69 The total amount of overhead cost allocated to Product X during the year would be closest to:

- $768,000.
- $1,201,300.
- $1,535,000.
- $1,814,000.

Multiple Choice

575.

TB 06-70 The credits to the Manufacturing Overhead control account during the year (prior to closing out the balance) would have totalled:

- $3,064,400.
- $3,076,500.
- $3,097,400.
- $3,130,400.

Multiple Choice
576.

TB 06-71 The debits to the Manufacturing Overhead control account during the year (prior to closing out the balance) would have totalled:

- $3,064,400.
- $3,076,500.
- $3,097,400.
- $3,130,400.

Multiple Choice

577.

TB 06-72 If total overapplied or underapplied overhead is closed to the Cost of Goods Sold account at the end of each year, the entry to Cost of Goods Sold would have been:

- $33,000 credit.
- $33,000 debit.
- $66,000 credit.
- $66,000 debit.
578.

**TB 06-73 Which of the following is not a limitation of activity-based costing?**

Which of the following is not a limitation of activity-based costing?

- More accurate product costs may result in better decisions.
- Changing from a traditional direct labour based costing system to an activity-based costing system changes product margins and other key performance indicators used by managers.
- Implementing an activity based costing system is more costly than implementing a traditional direct labour-based costing system.
- In practice, most managers insist on fully allocating all costs to products, customers, and other costing objects in an activity based costing system. This results in overstated costs.

**Multiple Choice**

579.

**TB 06-74 An activity-based costing that is designed for internal decision making may not conform to generally accepted accounting principles. Which of the following would cause that to be the case?**

- Direct manufacturing costs for labour and material are included.
- Indirect manufacturing costs for indirect materials are included.
- Some non-manufacturing costs are assigned to products.
- Indirect manufacturing costs for indirect labour are included.

**Multiple Choice**

580.

**TB 06-75 IBM is conducting a prototype testing of its newest product. This is an example of an activity at which level?**

- Product level activity.
- Batch level activity.
- Unit level activity.
- Facility level activity.

**Multiple Choice**
**581.**

**TB 06-76 Which of the following would be classified as a product-level activity?**

- Machine setups for standard products.
- Cafeteria facilities used by all employees.
- Personnel administration.
- Testing product prototypes.

**Multiple Choice**

**582.**

**TB 06-77 Which of the following would not be considered categories of quality costs?**

- Prevention costs.
- External failure costs.
- Direct material costs.
- Appraisal costs.

**Multiple Choice**

**583.**

**TB 06-78 Which of the following would be considered as a prevention cost?**

- Inspection of completed products prior to shipment to customers.
- Supplier management.
- Rework costs.
- Scrap costs.

**Multiple Choice**
TB 06-79 Which of the following would not be considered as an internal failure cost?

- Quality training.
- Investigation of cause of failure.
- Rework costs.
- Scrap costs.

Cummings Company has identified the following overhead activities costs and activity drivers for the coming year:

The company produces several different subassemblies used by other manufacturers. Information on separate batches for two of these subassemblies follows:

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Materials</td>
<td>$1,700</td>
<td>$1,900</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>$1,200</td>
<td>$1,200</td>
</tr>
<tr>
<td>Units Completed</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Number of setups</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Inspection hours</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Machine hours</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Parts used</td>
<td>40</td>
<td>80</td>
</tr>
</tbody>
</table>

The company's normal activity is 20,000 direct labour hours. Each batch uses 100 hours of direct labour. Upon investigation, you discover that Receiving employs a worker, who spends 75% of her time on the receiving activity and 25% of her time on inspecting products. Her salary is $80,000. Receiving also uses a forklift, at a cost of $12,000 per year for depreciation and fuel. The forklift is used only in receiving.
585.

TB 06-80 The amount of cost assigned to the receiving activity is?
The amount of cost assigned to the receiving activity is?

$72,000.

Labour cost 60,000(75% x 80,000) + Forklift cost 12,000(100% x 12,000) = 72,000

Essay

TB 06-80 The amount of cost assigned to the receiving activity is?

586.

TB 06-81 The activity rate for receiving is?
The activity rate for receiving is?

$.72 per part.

(72,000/100,000 = .72)

Essay

TB 06-81 The activity rate for receiving is?

587.

TB 06-82 The activity rate for setting up equipment is?
The activity rate for setting up equipment is?

$200 per set.

[120,000/600,000 = 200 per set up]

Essay

TB 06-82 The activity rate for setting up equipment is?
588.

*TB 06-83 The activity rate for Grinding is?*

The activity rate for Grinding is?

$5 per machine hour.  
$[180,000/36,000 = $5 per machine hour]

---

Essay

*TB 06-83 The activity rate for Grinding is?*

---

589.

*TB 06-84 The activity rate for Inspecting is?*

The activity rate for Inspecting is?

$10 per inspection hour.  
$[90,000/9,000 = $10/inspection hour]

---

Essay

*TB 06-84 The activity rate for Inspecting is?*

---

590.

*TB 06-85 If direct labour hours are used to assign total ov...*

If direct labour hours are used to assign total overhead costs, what is the application rate?

$23.10 per DLH.  
$[120,000 + 90,000 + 180,000 + 72,000]/20,000 = 23.10

---

Essay

*TB 06-85 If direct labour hours are used to assign total ov...*
591.

**TB 06-86** The unit cost for Dept. F, using direct labour hours to assign overhead is?

$26.05.

\[
\frac{1,700 + 1,200 + 2,310}{200} = 26.05
\]

Essay

**TB 06-86** The unit cost for Dept. F, using direct labour hours to assign overhead is?

592.

**TB 06-87** The unit cost for Dept. F, using activity rates, is?

$18.044.

\[
\frac{1,700 + 1,200 + 400 + 80 + 200 + 28.8}{200} = 18.044
\]

Essay

**TB 06-87** The unit cost for Dept. F, using activity rates, is?
Lionel Corporation manufactures two products, Product B and Product H. Product H is of fairly recent origin, having been developed as an attempt to enter a market closely related to that of Product B. Product H is the more complex of the two products, requiring two hours of direct labour time per unit to manufacture compared to one hour of direct labour time for Product B. Product H is produced on an automated production line.

Overhead is currently assigned to the products on the basis of direct labour-hours. The company estimated it would incur a total of $450,000 in manufacturing overhead costs and produce 7,500 units of Product H and 30,000 units of Product B during the current year. Unit costs for materials and direct labour are:

<table>
<thead>
<tr>
<th>Product</th>
<th>Direct Material</th>
<th>Direct Labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product B</td>
<td>$12</td>
<td>$10</td>
</tr>
<tr>
<td>Product H</td>
<td>$25</td>
<td>$20</td>
</tr>
</tbody>
</table>

Required:

a. Compute the predetermined overhead rate under the current method of allocation and determine the unit product cost of each product for the current year.

b. The company's overhead costs can be attributed to four major activities. These activities and the amount of overhead cost attributable to each for the current year are given below:

<table>
<thead>
<tr>
<th>Activity Cost Pools</th>
<th>Estimated Overhead Costs</th>
<th>Expected Activity Product B</th>
<th>Expected Activity Product H</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine setups required</td>
<td>$180,000</td>
<td>600</td>
<td>1,200</td>
<td>1,8</td>
</tr>
<tr>
<td>Purchase orders issued</td>
<td>38,382</td>
<td>500</td>
<td>100</td>
<td>6</td>
</tr>
<tr>
<td>Machine-hours required</td>
<td>92,650</td>
<td>6,800</td>
<td>10,200</td>
<td>17,0</td>
</tr>
<tr>
<td>Maintenance requests issued</td>
<td>138,968</td>
<td>693</td>
<td>907</td>
<td>1,6</td>
</tr>
<tr>
<td><strong>$450,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Using the data above and an activity-based costing approach, determine the unit product cost of each product for the current year.

a. The company expects to work 45,000 direct labour-hours during the current year, computed as follows:

Picture

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

Pred. ovd. rate = $450,000 / 45,000 DLHs = $10.00/DLH

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

Picture

b. The overhead rates are computed as follows:
The overhead cost attributable to each product is:

Overhead cost per unit:

Product B: $189,236 ÷ 30,000 units = $6.3079/unit.
Product H: $260,764 ÷ 7,500 units = $34.7685/unit.

Using activity-based costing, the unit product cost of each product would be:

Activity Cost Pools | Estimated Overhead Costs | Total Expected Activity | Rate
--- | --- | --- | ---
Machine setups | $180,000 | 1,800 | $100.000/sec
Purchase orders | 38,382 | 600 | $63.970/ord
Machine-hours | 92,650 | 17,000 | 5.450/hr
Maintenance requests | 138,968 | 1,600 | 86.855/rec
| $450,000 | |

Essay

TB 06-88 Lionel Corporation manufactures two products, Prod...
Flyer Corporation manufactures two products, Product A and Product B. Product B is of fairly recent origin, having been developed as an attempt to enter a market closely related to that of Product A. Product B is the more complex of the two products, requiring three hours of direct labour time per unit to manufacture compared to one and one-half hours of direct labour time for Product A. Product B is produced on an automated production line. Overhead is currently assigned to the products on the basis of direct labour-hours. The company estimated it would incur a total of $396,000 in manufacturing overhead costs and produce 5,500 units of Product B and 22,000 units of Product A during the current year. Unit costs for materials and direct labour are:

<table>
<thead>
<tr>
<th>Product</th>
<th>Direct Materials</th>
<th>Direct Labour</th>
<th>Manufacturing Overhead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product A</td>
<td>$9</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Product B</td>
<td>$20</td>
<td>15</td>
<td>24</td>
</tr>
</tbody>
</table>

a. The company expects to work 49,500 direct labour-hours during the current year, computed as follows:

b. The overhead rates are computed as follows:
The overhead cost attributable to each product is:

<table>
<thead>
<tr>
<th>Activity Cost Pools</th>
<th>Estimated Overhead Costs</th>
<th>Total Expected Activity</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine setups</td>
<td>$170,000</td>
<td>1,700</td>
<td>$100/setup</td>
</tr>
<tr>
<td>Purchase orders</td>
<td>37,000</td>
<td>500</td>
<td>74/order</td>
</tr>
<tr>
<td>Machine-hours</td>
<td>91,000</td>
<td>13,000</td>
<td>7/hour</td>
</tr>
<tr>
<td>Maintenance requests</td>
<td>98,000</td>
<td>1,000</td>
<td>98/request</td>
</tr>
<tr>
<td></td>
<td><strong>$396,000</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Using activity-based costing, the unit product cost of each product would be:

<table>
<thead>
<tr>
<th>Product A Activity</th>
<th>Amount</th>
<th>Product B Activity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine setups, $100.00/setup</td>
<td>700</td>
<td>1,000</td>
<td>$100</td>
</tr>
<tr>
<td>Purchase orders, $74.00/order</td>
<td>300</td>
<td>200</td>
<td>1</td>
</tr>
<tr>
<td>Machine-hours, $7.00/hour</td>
<td>4,000</td>
<td>9,000</td>
<td>6</td>
</tr>
<tr>
<td>Maintenance requests, at $98.00/request</td>
<td>400</td>
<td>600</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>39,200</strong></td>
<td><strong>28,000</strong></td>
<td><strong>39,200</strong></td>
</tr>
</tbody>
</table>

Overhead cost per unit:

Product A: $159,400 ÷ 22,000 units = $7.2455/unit.
Product B: $236,600 ÷ 5,500 units = $43.0182/unit.

Using activity-based costing, the unit product cost of each product would be:

<table>
<thead>
<tr>
<th></th>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials</td>
<td>$9,0000</td>
<td>$20,0000</td>
</tr>
<tr>
<td>Direct labour</td>
<td>7,0000</td>
<td>15,0000</td>
</tr>
<tr>
<td>Manufacturing overhead</td>
<td>7.2455</td>
<td>43.0182</td>
</tr>
<tr>
<td><strong>Total unit product cost</strong></td>
<td><strong>$23,2455</strong></td>
<td><strong>$78,0182</strong></td>
</tr>
</tbody>
</table>
EMD Corporation manufactures two products, Product S and Product W. Product W is of fairly recent origin, having been developed as an attempt to enter a market closely related to that of Product W. Product W is the more complex of the two products, requiring one hour of direct labour time per unit to manufacture compared to one-half hour of direct labour time for Product S. Product W is produced on an automated production line.

Overhead is currently assigned to the products on the basis of direct labour-hours. The company estimated it would incur a total of $500,000 in manufacturing overhead costs and produce 10,000 units of Product W and 60,000 units of Product S during the current year. Unit cost for materials and direct labour are:

<table>
<thead>
<tr>
<th></th>
<th>Product S</th>
<th>Product W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct material</td>
<td>$10</td>
<td>$24</td>
</tr>
<tr>
<td>Direct labour</td>
<td>$8</td>
<td>$12</td>
</tr>
</tbody>
</table>

Required:

a. Compute the predetermined overhead rate under the current method of allocation and determine the unit product cost of each product for the current year.

b. The company's overhead costs can be attributed to four major activities. These activities and the amount of overhead cost attributable to each for the current year are given below:

Using the data above and an activity-based costing approach, determine the unit product cost of each product for the current year.

a. The company expects to work 40,000 direct labour-hours during the current year, computed as follows:

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

Pred. ovhd. rate = $500,000 ÷ 40,000 DLHs = $12.50/DLH

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

<table>
<thead>
<tr>
<th></th>
<th>Product S</th>
<th>Product W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials</td>
<td>$10.00</td>
<td>$24.00</td>
</tr>
<tr>
<td>Direct labour</td>
<td>8.00</td>
<td>12.00</td>
</tr>
<tr>
<td>Manufacturing overhead:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product S-half hour</td>
<td>6.25</td>
<td></td>
</tr>
<tr>
<td>Product W-one hour</td>
<td></td>
<td>12.50</td>
</tr>
<tr>
<td>Total</td>
<td>$24.25</td>
<td>$48.50</td>
</tr>
</tbody>
</table>

b. The overhead rates are computed as follows:
The overhead cost attributable to each product is:

Overhead cost per unit:

Product S: $205,825 \div 60,000 \text{ units} = $3.4304/\text{unit}.
Product W: $294,175 \div 10,000 \text{ units} = $29.4175/\text{unit}.

Using activity-based costing, the unit product cost of each product would be:

<table>
<thead>
<tr>
<th></th>
<th>Product S</th>
<th>Product W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials</td>
<td>$10.0000</td>
<td>$24.0000</td>
</tr>
<tr>
<td>Direct labour</td>
<td>8.0000</td>
<td>12.0000</td>
</tr>
<tr>
<td>Manufacturing overhead</td>
<td>3.4304</td>
<td>29.4175</td>
</tr>
<tr>
<td>Total unit product cost</td>
<td>$21.4304</td>
<td>$65.4175</td>
</tr>
</tbody>
</table>
TB 06-91 Cabanos Company manufactures two products, Product...

Cabanos Company manufactures two products, Product C and Product D. The company estimated it would incur a total of $160,790 in manufacturing overhead costs during the current period. Overhead currently is applied to the products on the basis of direct labour-hours. Data concerning the current period's operations appear below:

Required:

a. Compute the predetermined overhead rate under the current method, and determine the unit product cost of each product for the current year.

b. The company is considering using an activity-based costing system to compute unit product costs for external financial reports instead of its traditional system based on direct labour-hours. The activity-based costing system would use three activity cost pools. Data relating to these activities for the current period are given below:

Determine the unit product cost of each product for the current period using the activity-based costing approach.

a. The expected total direct labour-hours during the period are computed as follows:

<table>
<thead>
<tr>
<th>Product C</th>
<th>3,400 units × 1.4 hr.</th>
<th>4,760 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product D</td>
<td>4,800 units × 1.9 hrs.</td>
<td>9,120 hours</td>
</tr>
<tr>
<td>Total direct labour-hours</td>
<td>13,880 hours</td>
<td></td>
</tr>
</tbody>
</table>

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

Estimated overhead cost, $160,790
× Estimated direct labour-hours, 13,880 = $11.58/DLH

Using this overhead rate, the unit product costs are:

b. The overhead rates for each activity center are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Estimated Overhead Costs</th>
<th>Expected Activity</th>
<th>Overhead Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine setups</td>
<td>$12,190</td>
<td>230</td>
<td>$53.00</td>
</tr>
<tr>
<td>Purchase orders</td>
<td>$79,200</td>
<td>1,650</td>
<td>$48.00</td>
</tr>
<tr>
<td>General factory</td>
<td>$69,400</td>
<td>13,880</td>
<td>$5.00</td>
</tr>
</tbody>
</table>

The overhead cost charged to each product is:
Overhead cost per unit:

Product C: \( \frac{63,080}{3,400 \text{ units}} = \$18.55 \text{ per unit.} \)
Product D: \( \frac{97,710}{4,800 \text{ units}} = \$20.36 \text{ per unit.} \)

Using activity based costing, the unit product cost of each product would be:

<table>
<thead>
<tr>
<th>Essay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TB 06-91 Cabanos Company</strong></td>
</tr>
<tr>
<td>manufactures two products,</td>
</tr>
<tr>
<td><strong>Product...</strong></td>
</tr>
</tbody>
</table>
597.

**TB 06-92 Cabigas Company manufactures two products, Product...**

Cabigas Company manufactures two products, Product C and Product D. The company estimated it would incur a total of $167,140 in manufacturing overhead costs during the current period. Overhead currently is applied to the products on the basis of direct labour-hours. Data concerning the current period's operations appear below:

Required:

a. Compute the predetermined overhead rate under the current method, and determine the unit product cost of each product for the current year.

b. The company is considering using an activity-based costing system to compute unit product costs for external financial reports instead of its traditional system based on direct labour-hours. The activity-based costing system would use three activity cost pools. Data relating to these activities for the current period are given below:

<table>
<thead>
<tr>
<th>Activity Cost Pool</th>
<th>Estimated Overhead Costs</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Product C</td>
</tr>
<tr>
<td>Machine setups</td>
<td>$13,630</td>
<td>130</td>
</tr>
<tr>
<td>Purchase orders</td>
<td>85,750</td>
<td>750</td>
</tr>
<tr>
<td>General factory</td>
<td>67,760</td>
<td>4,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$167,140</strong></td>
<td></td>
</tr>
</tbody>
</table>

Determine the unit product cost of each product for the current period using the activity-based costing approach.

a. The expected total direct labour-hours during the period are computed as follows:

- **Product C:** 2,000 units × 2.0 hr. = 4,000 hours
- **Product D:** 2,700 units × 0.8 hrs. = 2,160 hours
- **Total direct labour-hours:** 6,160 hours

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

- Estimated overhead cost, $167,140
- Estimated direct labour-hours, 6,160 = $27.13/DLH

Using this overhead rate, the unit product costs are:

- **Picture**

b. The overhead rates for each activity center are as follows:

- **Picture**

The overhead cost charged to each product is:
Overhead cost per unit:

Product C: $86,860 ÷ 2,000 units = $43.43 per unit.
Product D: $80,280 ÷ 2,700 units = $29.73 per unit.

Using activity-based costing, the unit product cost of each product would be:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Amount</th>
<th>Activity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine setups</td>
<td>130</td>
<td>$6,110</td>
<td>160</td>
</tr>
<tr>
<td>Purchase orders</td>
<td>750</td>
<td>36,750</td>
<td>1,000</td>
</tr>
<tr>
<td>General factory</td>
<td>4,000</td>
<td>44,000</td>
<td>2,160</td>
</tr>
<tr>
<td><strong>Total overhead cost</strong></td>
<td><strong>$86,860</strong></td>
<td><strong>$80,280</strong></td>
<td></td>
</tr>
</tbody>
</table>

Overhead cost per unit:

Product C: $86,860 ÷ 2,000 units = $43.43 per unit.
Product D: $80,280 ÷ 2,700 units = $29.73 per unit.

Using activity-based costing, the unit product cost of each product would be:

**Essay**

*TB 06-92 Cabigas Company manufactures two products, Product...*
Daba Company manufactures two products, Product F and Product G. The company expects to produce and sell 1,400 units of Product F and 1,800 units of Product G during the current year. The company uses activity-based costing to compute unit product costs for external reports. Data relating to the company's three activity cost pools are given below for the current year:

Required:

Using the activity-based costing approach, determine the overhead cost per unit for each product.

The overhead rates for each activity center are as follows:

The overhead cost charged to each product is:

Overhead cost per unit:

Product F: \( \frac{59,930}{1,400 \text{ units}} = 42.81 \text{ per unit} \)
Product G: \( \frac{104,310}{1,800 \text{ units}} = 57.95 \text{ per unit} \)
TB 06-94 Daston Company manufactures two products, Product ...

Daston Company manufactures two products, Product F and Product G. The company expects to produce and sell 1,600 units of Product F and 3,000 units of Product G during the current year. The company uses activity-based costing to compute unit product costs for external reports. Data relating to the company's three activity cost pools are given below for the current year:

Required:

Using the activity-based costing approach, determine the overhead cost per unit for each product.

The overhead rates for each activity center are as follows:

<table>
<thead>
<tr>
<th>Activity Cost Pool</th>
<th>Estimated Overhead Costs</th>
<th>Expected Activity</th>
<th>Overhead Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine setups</td>
<td>$14,960</td>
<td>220</td>
<td>$68.00</td>
</tr>
<tr>
<td>Purchase orders</td>
<td>$63,360</td>
<td>1,760</td>
<td>$36.00</td>
</tr>
<tr>
<td>General factory</td>
<td>$32,240</td>
<td>2,480</td>
<td>$13.00</td>
</tr>
</tbody>
</table>

The overhead cost charged to each product is:

<table>
<thead>
<tr>
<th>Product F</th>
<th>Product G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Amount</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Machine setups</td>
<td>130</td>
</tr>
<tr>
<td>Purchase orders</td>
<td>650</td>
</tr>
<tr>
<td>General factory</td>
<td>1,280</td>
</tr>
<tr>
<td>Total overhead cost</td>
<td>$48,880</td>
</tr>
</tbody>
</table>

Overhead cost per unit:

Product F: $48,880 ÷ 1,600 units = $30.55 per unit
Product G: $61,680 ÷ 3,000 units = $20.56 per unit
Easton Company uses activity-based costing to compute product costs for external reports. The company has three activity centers and applies overhead using predetermined overhead rates for each activity center. Estimated costs and activities for the current year are presented below for the three activity centers:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Estimated Overhead Cost</th>
<th>Expected Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch setups</td>
<td>$18,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Material handling</td>
<td>$43,400</td>
<td>1,400</td>
</tr>
<tr>
<td>General factory</td>
<td>$61,600</td>
<td>2,200</td>
</tr>
</tbody>
</table>

Actual costs and activities for the current year were as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Estimated Overhead Rate</th>
<th>Actual Activity</th>
<th>Overhead Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch setups</td>
<td>$12</td>
<td>1,450</td>
<td>$17,400</td>
</tr>
<tr>
<td>Material handling</td>
<td>$31</td>
<td>1,400</td>
<td>43,400</td>
</tr>
<tr>
<td>General factory</td>
<td>$28</td>
<td>2,180</td>
<td>61,000</td>
</tr>
<tr>
<td>Total overhead applied</td>
<td></td>
<td></td>
<td>$121,800</td>
</tr>
</tbody>
</table>

Required:

a. How much total overhead was applied to products during the year?

b. By how much was overhead overapplied or underapplied? (Be sure to clearly label your answer as to whether the overhead was overapplied or underapplied.)
<table>
<thead>
<tr>
<th>Overhead applied</th>
<th>$121,840</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual overhead costs:</td>
<td></td>
</tr>
<tr>
<td>Batch setups</td>
<td>$18,740</td>
</tr>
<tr>
<td>Material handling</td>
<td>42,060</td>
</tr>
<tr>
<td>General factory</td>
<td>60,440</td>
</tr>
<tr>
<td>Overhead overapplied</td>
<td>$ 60</td>
</tr>
</tbody>
</table>

*Essay*

TB 06-95 Easton Company uses activity-based costing to comp...
Ekstein Company uses activity-based costing to compute product costs for external reports. The company has three activity centers and applies overhead using predetermined overhead rates for each activity center. Estimated costs and activities for the current year are presented below for the three activity centers:

<table>
<thead>
<tr>
<th>Activity Center</th>
<th>Actual Overhead Cost</th>
<th>Actual Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch setups</td>
<td>$47,810</td>
<td>2,620</td>
</tr>
<tr>
<td>Material handling</td>
<td>$79,830</td>
<td>2,810</td>
</tr>
<tr>
<td>General factory</td>
<td>$48,800</td>
<td>2,080</td>
</tr>
</tbody>
</table>

Actual costs and activities for the current year were as follows:

Required:

a. How much total overhead was applied to products during the year?

b. By how much was overhead overapplied or underapplied? (Be sure to clearly label your answer as to whether the overhead was overapplied or underapplied.)

a.

<table>
<thead>
<tr>
<th>Activity Center</th>
<th>Estimated Overhead Costs</th>
<th>Expected Activity</th>
<th>Overhead R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch setups</td>
<td>$48,600</td>
<td>2,700</td>
<td></td>
</tr>
<tr>
<td>Material handling</td>
<td>$81,200</td>
<td>2,800</td>
<td></td>
</tr>
<tr>
<td>General factory</td>
<td>$48,000</td>
<td>2,000</td>
<td></td>
</tr>
</tbody>
</table>

The amount of overhead applied to production is determined as follows:

Picture

b.
602.

**TB 06-96 Ekstein Company uses activity-based costing to com...**

**Overhead applied**

Actual overhead costs:

- Batch setups: $47,810
- Material handling: 79,830
- General factory: 48,800
- Overhead overapplied: $2

$178.

---

**Essay**

TB 06-97 What steps are included in designing and implement...

What steps are included in designing and implementing an activity-based costing system?

1. Identify activities and create an activity dictionary.
2. Create activity pools.
3. Identify the resources consumed by individual activity pools.
4. Identify the activity measures for each activity pool.
5. Estimate the total activity volume for each measure.
6. Compute a predetermined activity rate for each activity cost pool.
7. Allocate activity costs to desired cost objects.

**Essay**

TB 06-97 What steps are included in designing and implement...
603.

**TB 06-98** What are the four categories of quality costs and which costs are included within each?

- **Prevention costs** - costs associated with activities aimed at preventing future defects/errors.
- **Appraisal costs** - costs associated with quality inspection activities.
- **Internal failure costs** - costs associated with activities carried out when the defect is discovered before the product is delivered to the customer.
- **External failure costs** - costs associated with activities undertaken after the defect/error is discovered by the customer.

604.

**TB 07-01** The usual starting point in budgeting for a for-profit organization is to make a forecast of cash receipts and cash disbursements.

- True
- False

605.

**TB 07-02** Budgets are used for planning rather than for control of operations.

- True
- False