Communication Project

Toastmasters

Paper Company

6. In a job order cost system using predetermined factory overhead rates, indirect materials usually are recorded initially as an increase in
   a. Work-in-process control.
   b. Factory overhead control.
   c. Factory overhead applied.
   d. Stores control.

7. ARIE Nov 96 #47
   The standard direct material cost to produce a unit of Lem is 4 meters of material at $2.50 per meter. During May 1995, 4,200 meters of material costing $10,080 were purchased and used to produce 1,000 units of Lem. What was the material price variance for May 1995?
   a. $400 favorable.
   b. $420 unfavorable.
   c. $80 unfavorable.
   d. $480 unfavorable.

2-72. Apollo Company manufactures dining room furniture. Recently the company decided to develop a formal cost accounting system. The company is currently converting all costs into classifications as related to its manufacturing processes. For the following items, label each as being appropriate for (1) cost tracing to the finished furniture, (2) cost allocation of an indirect manufacturing cost to the finished furniture, or (3) as a nonmanufacturing item.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Tracing</th>
<th>Cost Allocation</th>
<th>Nonmanufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumber</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lathe operator wages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lathe depreciation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lathe maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lathe department</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>supervisor</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Glue for assembly</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screws for assembly</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cragging for shipment</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washroom supplies</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpenter wages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samples for trade shows</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

252 STANDARD

\[
\text{Variance} = \frac{10,080}{4200 \text{ units}} - \frac{240 \text{ actual}}{4200 \text{ units}} = \frac{252}{420} \text{ F}
\]
<table>
<thead>
<tr>
<th>Standard</th>
<th>Standard cost for one completed unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>Price</td>
</tr>
<tr>
<td>Material</td>
<td>3 lbs.</td>
</tr>
<tr>
<td>Labor</td>
<td>2 hrs.</td>
</tr>
<tr>
<td>Overhead:</td>
<td>Variable</td>
</tr>
<tr>
<td></td>
<td>Fixed</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Budgeted Activity:** 50 Standard direct labor hours

**Actual Data:**
- Units produced: 20 x 2 = 40
- Material: 100 pounds at a total cost of $225
- Labor: 36 hours at $4.10 = $123
- Overhead: Variable $45, Fixed $115

**Required:** Compute the following variances:

- **Material price variance** (AP – SP)AQ
  - Price difference: ($2.25 - $2.00) times Actual quantity or: $0.25 x 100 = $25 Unfavorable

- **Material quantity variance** (AQ – SQ)SP
  - Quantity difference: (100 – 90) times Standard price or: 10 x $2 = $20 Unfavorable

NOTE: AP = $225 + 100 = $2.25, SO = 20 units x 3 lbs. = 60

- **Labor rate variance** (AP – SP)AQ
  - Rate difference: ($4.10 – $4.00) times Actual quantity or: $0.10 x 90 = $9.00 Unfavorable

- **Labor quantity variance**
  - Labor quantity variance = \( \frac{SP \times (AH - SH)}{AH} \)
  - \( \frac{20 \times 90}{60} \)
  - = 80 F

2. Cardinal Company needs 20,000 units of Part K28 to use in its production cycle. The following information is available:

**Costs to Cardinal to make Part K28:**
- Direct materials: $4
- Direct manufacturing labor: $16
- Variable overhead allocated: $8
- Fixed overhead allocated: $10
- Total costs: $38

If Cardinal buys the part from Oriole instead of making it, the released facilities will be idle. Sixty percent of the fixed overhead allocated will continue if the part is bought from Oriole.

**Should Cardinal make or buy Part K28?** Show your computations.

<table>
<thead>
<tr>
<th>Relevant Items</th>
<th>Make</th>
<th>Buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside purchase of part, 20,000 x $26</td>
<td>$80,000</td>
<td>$720,000</td>
</tr>
<tr>
<td>Direct materials, 20,000 x $4</td>
<td>$80,000</td>
<td>4</td>
</tr>
<tr>
<td>Direct manufacturing labor, 20,000 x $16</td>
<td>320,000</td>
<td>4</td>
</tr>
<tr>
<td>Variable overhead, 20,000 x $8</td>
<td>160,000</td>
<td>4</td>
</tr>
<tr>
<td>Fixed overhead, 20,000 x $10(1-0.60)</td>
<td>80,000</td>
<td>4</td>
</tr>
<tr>
<td>Total relevant costs</td>
<td>$640,000</td>
<td>$720,000</td>
</tr>
</tbody>
</table>

Difference in favor of making = $80,000

Fixed overhead that cannot be avoided = 20,000 x ($10 x 0.60) = $120,000. This amount is irrelevant to the decision because it is the same under both alternatives.
3. Explain each of the four key success factors

Cost
Reduce cost

Quality
High quality

Time
How quickly you get new products to market

Innovation
Introduction of new products

5. Explain one advantage and one disadvantage of Zero Based Budgeting.

Advantages:
- Takes management time
- Helps resource allocation

Disadvantages:
- Requires too much paperwork
- Needs good accounting system

3. Peak Load Pricing

Charging more at peak periods to release

Karing

5. Computer Monitors, Inc., currently sells 17" monitors for $270. It has costs of $210. A competitor is bringing a new 17" monitor to market that will sell for $225. Management believes it must lower the price to $225 to compete in the market for 17" monitors. Marketing believes that the new price will cause sales to increase by 10 percent, even with a new competitor in the market. Computer Monitor, Inc.'s sales are currently 10,000 monitors per year.

41. What is the target cost if target profit is 25 percent of sales (rounded to the nearest cent)?

a. $56.25
b. $67.50
c. $168.75
d. $202.50

Answer: $225 - $225(0.25) = $168.75
(CPA) The manufacturing capacity of Jordan Company’s facilities is 30,000 units of a product per year. A summary of operating results for the year ended December 31, 1998 is as follows:

Revenues,  
18,000 units × $100 = $1,800,000
Variable costs  
990,000
Contribution margin  
810,000
Fixed costs  
495,000
Operating income  
$315,000

A foreign distributor has offered to buy 15,000 units at $90 per unit during 1999. Assume all of Jordan’s costs will have the same behavior patterns in 1999 as in 1998. If Jordan accepts this offer and rejects 3,000 units of business from regular customers so as not to exceed its capacity, total operating income for 1999 is:

\[
\begin{align*}
\text{Revenues, } (15,000 \times $100) + (15,000 \times $90) &= 2,850,000 \\
\text{Variable costs, } ($990,000 + 18,000) \times 30,000 &= 1,650,000 \\
\text{Contribution margin} &= 1,200,000 \\
\text{Fixed costs} &= 495,000 \\
\text{Operating income} &= 705,000
\end{align*}
\]

Information for Garner Company’s direct-labor costs for the month of September 2003 is as follows:

<table>
<thead>
<tr>
<th>Actual direct-labor hours</th>
<th>34,500 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard direct-labor hours</td>
<td>35,000 hours</td>
</tr>
<tr>
<td>Total direct-labor payroll</td>
<td>$241,500</td>
</tr>
<tr>
<td>Direct-labor efficiency variance—favorable</td>
<td>$5,500</td>
</tr>
</tbody>
</table>

[CPA Adapted] What is Garner’s direct-labor price (or rate) variance?
2. The following data pertain to Thorpe Company’s operations for January of the current year:

<table>
<thead>
<tr>
<th>Inventories</th>
<th>Beginning</th>
<th>Ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials</td>
<td>$18,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Work in process</td>
<td>9,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Finished goods</td>
<td>27,000</td>
<td>36,000</td>
</tr>
</tbody>
</table>

Additional cost information for January is direct materials purchased $42,000, direct manufacturing labor $30,000, manufacturing overhead $40,000.

Compute cost of goods manufactured for January.

- Direct material used, $(18,000 + 42,000) - 15,000 = 45,000$
- Direct manufacturing labor = 30,000
- Manufacturing overhead = 40,000
- Manufacturing costs incurred during the period = 115,000
- Add beginning work-in-process inventory = 9,000
- Total manufacturing costs to account for = 124,000
- Deduct ending work-in-process inventory = 6,000
- Cost of goods manufactured = 118,000

In its first year of operations, Magna Manufacturers had the following costs when it produced 100,000 and sold 80,000 units of its only product:

- Manufacturing costs—Fixed = $100,000
- Variable = 160,000
- Selling and admin costs—Fixed = 90,000
- Variable = 40,000

How much lower would Magna’s net income be if it used variable costing instead of full absorption costing?

- $35,000
- $54,000
- $56,000
- $94,000

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\text{CPA 40} \quad \frac{180,000}{100,000 \text{ units}} = \frac{180}{100} \text{ per unit}
\]

\[
\text{CPA 40} \quad \frac{180 \times 80,000 \text{ sold}}{100,000 \text{ units}} = \frac{1440,000}{100,000} = 14.4 \text{ per unit}
\]

\[
\text{Variable Absorption} \quad \frac{180,000 - 144,000}{100,000} = \frac{36,000}{100,000} = 0.36 \text{ per unit}
\]

This test was: