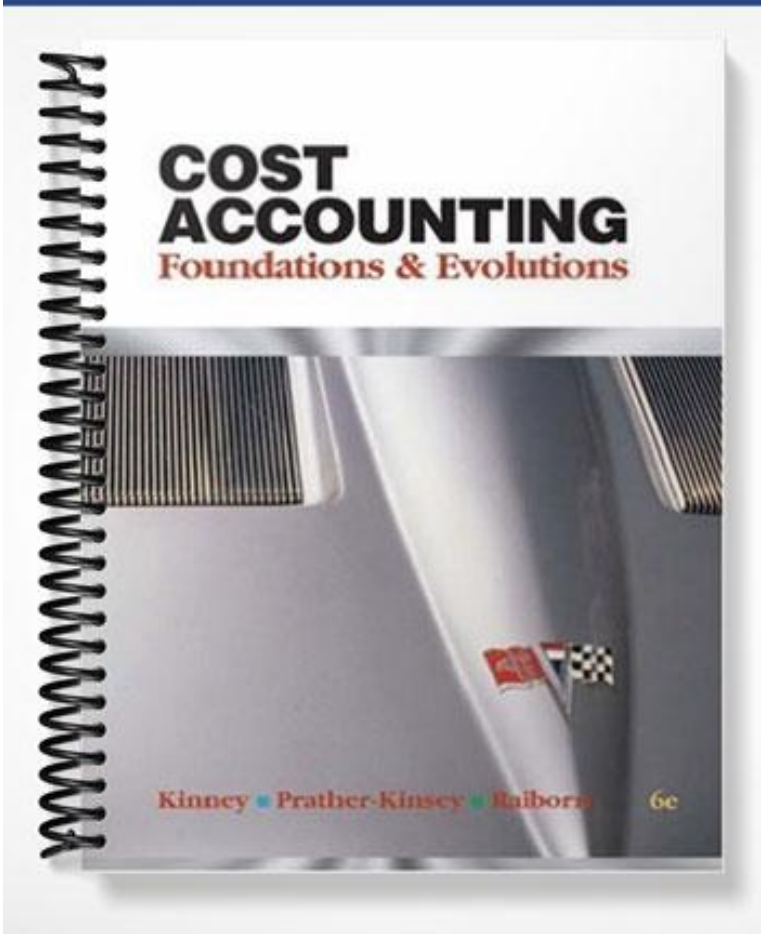
SOLUTIONS MANUAL



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# CHAPTER 2

## Cost Terminology and Cost Behaviors

## Questions

**1.** A cost object is anything for which management wants to collect or accumulate costs. Direct costs are conveniently and economically traceable to the cost object whereas indirect costs are not. Indirect costs must be allocated to the cost object.

**2.** The assumed range of activity that reflects the company's normal operating range is referred to as the relevant range. Outside the relevant range, costs may be curvilinear because of purchase discounts, improved worker skill and productivity, worker crowding, loss in employee efficiency during overtime hours, etc. Although a curvilinear graph is more indicative of reality, it is not as easy to use in planning or controlling costs. Accordingly, accountants choose the range in which these fixed and variable costs are assumed to behave as they are defined (linear) and, as such, represent an approximation of reality.

**3.** It is not necessary for a causal relationship to exist between the cost predictor and the cost. All that is required is that there is a strong correlation between movement in the predictor and the cost. Alternatively, a cost driver is an activity that actually causes costs to be incurred.

The distinction between cost drivers and predictors is important because it relates to one of the objectives of managers: to control costs. By focusing cost control efforts on cost drivers, managers can exert control over costs. Exerting control over predictors that are not cost drivers will have no cost control effect.

**4.** A product cost is one that is associated with inventory. In a manufacturing company, product costs would include direct materials, direct labor, and overhead. In a merchandising company, product costs are the costs of purchasing inventory and the related freight-in costs. In a service company, product costs are those costs that are incurred to generate the services provided such as supplies, service labor, and service-related overhead costs.

In all three types of organizations, a period cost is any cost that is not a product cost. These costs are noninventoriable and are incurred in the nonfactory or non-production areas of a manufacturing company or in the nonsales or nonservice areas, respectively, of a retailer or service company. In general, these costs are incurred for selling and administrative activities. Many period costs are expensed when incurred, although some may be capitalized as prepaid expenses or other nonfactory assets.

**5.** Conversion cost is the sum of direct materials and direct labor. Conversion is the process that converts raw materials and other inputs into salable products (output).

**6.** The only difference between the two systems is in their treatment of overhead. Under a normal cost system, a level of activity is chosen and the budgeted amount of overhead is determined before a period begins. Overhead is then applied to products as production occurs by using a predetermined overhead application rate. Under an actual cost system, actual overhead is applied to production. Because actual overhead cannot be determined until the period ends, the overhead allocation occurs and product cost can be determined only at period-end.

The major advantage of using a normal cost system is that it allows a product's cost to be determined (estimated) at the time of production. Another major advantage is that a normal cost system provides a product cost that is stable across fluctuating levels of production and sales.



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**7.** CGM is the total production cost of the goods that were completed and transferred to Finished Goods Inventory during the period. This amount is similar to the cost of net purchases in the cost of goods sold schedule for a retailer. Since CGM is used in computing cost of goods sold, it appears on the income statement.

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# Exercises

**8.**
a. V, PD
b. V, PT
c. F, PD
d. V, PT
e. V, PT
f. V, PT (could be mixed)
g. F, PT
h. F, PD (could be product)
i. V, PT (could be fixed)
j. V, PT
k. V, PT

**9.**

| | Cost Object | |
|---|---|---|
| | Laptop | Plant |
| Touch pad and buttons | Direct | Direct |
| Network connector | Direct | Direct |
| Battery | Direct | Direct |
| AC Adapter | Direct | Direct |
| CD Drive | Direct | Direct |
| Mother board | Direct | Direct |
| Glue | Indirect | Direct |
| Screws | Indirect | Direct |
| Paper towels | Indirect | Direct |
| Machinery and equipment oil | Indirect | Direct |

**10.**
a. Direct
b. Direct
c. Direct
d. Direct
e. Direct
f. Indirect
g. Indirect
h. Direct

**11.**
a. Stainless steel, plastic and fiberglass, flatware racks = $889,000 + $30,000 + $18,400 = $937,400

b. $400,000 (equipment operators)

c. $13,300 indirect material (oil and grease)
$336,000 indirect labor (mechanics and supervisors

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**12. a. 1. 500 returns:**
**Total cost = $900 + ($5 x 500) = $3,400**
**Cost per unit = $3,400 ÷ 500 = $6.80**

**2. 600 returns:**
**Total cost = $900 + ($5 x 600) = $3,900**
**Cost per unit = $3,900 ÷ 600 = $6.50**

**3. 1,200 returns:**
**Total cost = $900 + ($5 x 1,200) = $6,900**
**Cost per unit = $6,900 ÷ 1,200 = $5.75**

**b. The fixed cost per unit varies inversely with activity. Therefore, as the activity (tax returns prepared) increases, the fixed cost per unit decreases.**

**13. a.**

| | |
|---|---|
| **Total fixed cost** | **$ 70,000** |
| **Total variable cost (10,000 tickets x $20/ticket)** | **200,000** |
| **Total cost** | **$270,000** |

**b.**

| | |
|---|---|
| **Total cost** | **$270,000** |
| **Desired profit margin (10,000 tickets x $5/ticket)** | **50,000** |
| **Total sales price** | **320,000** |
| **Divided by assumed number of tickets sold** | **÷ 10,000** |
| **Selling price per ticket** | **$ 32.00** |

**c.**

| | | |
|---|---|---|
| **Total revenue (5,000 tickets x $32/ticket)** | | **$160,000** |
| **Total cost:** | | |
| **Fixed** | **70,000** | |
| **Variable (5,000 x $20)** | **100,000** | **170,000** |
| **Net loss** | | **$ (10,000)** |

**d. The assumption made was that 10,000 tickets would be sold. The fraternity/sorority should have been informed that the fixed cost per ticket would vary, depending on the number of tickets sold.**

**e.**

| | | |
|---|---|---|
| **Total revenue (20,000 tickets x $32/ticket)** | | **$640,000** |
| **Total cost:** | | |
| **Fixed** | **70,000** | |
| **Variable (20,000 x $20)** | **400,000** | **470,000** |
| **Net profit** | | **$170,000** |

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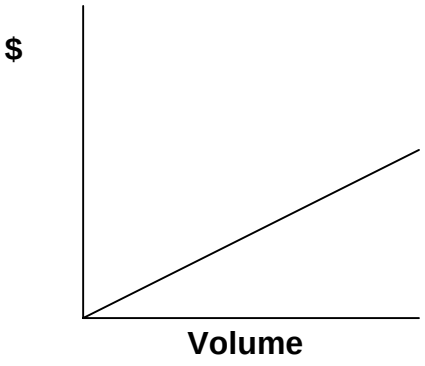
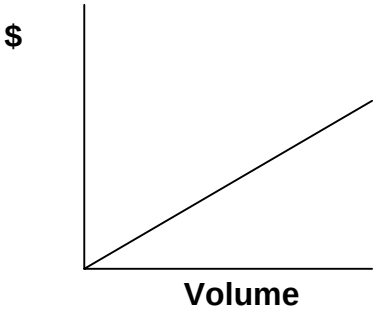
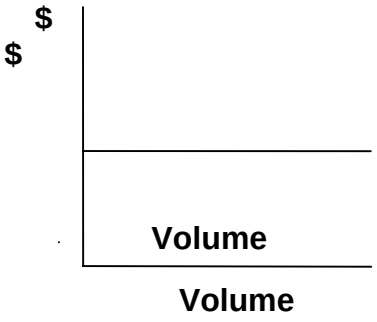
**14.** **Cost of rubber material (variable)**




**Cost of steel mesh (variable)**
**Cost of steel mesh**




**Cost of depreciation on factory building (fixed)**

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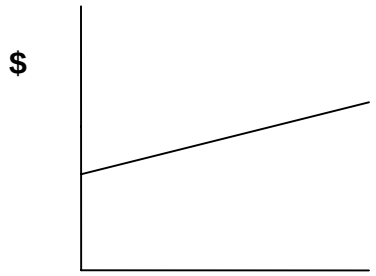
**Cost of utilities (mixed)**




**15. a. Cardboard, $0.60; cloth materials, $1.50; plastic, $0.70; depreciation, $0.90; supervisors' salaries, $2.40; utilities, $0.40; total cost, $6.50.**

**b. Cardboard, variable; cloth materials, variable; plastic, variable; depreciation, fixed; supervisors' salaries, fixed; and utilities, mixed.**

**c. If the company produces 5,000 caps this month, the total cost per unit will decrease. The variable cost (cardboard, cloth, plastic) will remain constant per unit. The total cost for depreciation and supervisors' salaries will remain fixed, and, thus, will result in a lower cost per unit. The utility cost will rise in total, but because it is mixed, it is impossible (without other information) to estimate its total or per unit cost. Without knowing the cost formula for utility costs, it is impossible to determine the total cost of making 5,000 caps.**

**16. a.**

| | |
|---|---|
| One month of insurance ($12,000 ÷ 6) | $ 2,000 |
| Bonus to corporate president | 80,000* |
| Utility cost on headquarters ($20,000 x .40) | 8,000 |
| Total | $90,000 |

***This solution assumes the bonus was related solely to this month.**

**b.**

| | |
|---|---|
| The insurance premium ($12,000 x 5/6) | $10,000 |

**c.**

| | |
|---|---|
| Property taxes ($48,000 x 1/3) | $16,000 |
| Utility cost on factory ($20,000 x .60) | 12,000 |
| Total | $28,000 |

**d. Since product costs are assigned to products made, they cannot be classified as expired or unexpired, because it is not known whether the associated products made during May were sold. If sold, the costs would be expired; if unsold, the costs would be unexpired and be accumulated in the Finished Goods account.**

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**17. a. 9,100/10,000 ($25,000) = $22,750 is expired cost.**

**b. Cost of goods sold, $22,750**
**Finished goods inventory, $2,250**

**18. 1. Number of patients admitted**
**2. Number of patients admitted**
**3. Number of surgeries performed**
**4. Number of surgeries performed**
**5. Number of tests ordered**
**6. Number of tests ordered**
**7. Number of surgeries performed**
**8. Number of surgeries performed**
**9. Number of surgeries performed**
**10. Number of surgeries performed**
**11. Number of surgeries performed**
**12. Number of patients admitted**

**19. a. 1. Number of clients contacted, number of new clients generated, number of miles traveled, nights away from home.**

**2. Number of supplies requisitions, number of hours worked, number of copies made**

**3. Number of hours on line, number of hours logged onto the computer, number of hours worked**

**4. Number of hours worked, number of times maintenance crew visits the accounting firm**

**b. The distinction between a cost predictor and a cost driver is whether the activity measure actually causes the cost to be incurred. A cost predictor is merely an activity that changes with changes in the cost. A cost driver causes costs to be incurred. Of the costs addressed in part (a), cost drivers that could also be cost predictors would be 1) number of miles traveled, 2) number of times supplies are requisitioned, 3) number of hours on line, and 4) number of times maintenance visited the accounting firm**

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**20. a. 6,000 (36,000 total – 30,000 regular)**

**b. Direct labor: 36,000 hours x $20/hour = $720,000**
**Overhead: $810,000 - $720,000 = $90,000**

**c. Shift premiums:**

| | |
|---|---|
| Second shift | 5% x $20 = $ 1.00 |
| Third shift | 10% x $20 = $ 2.00 |
| Overtime premium | 50% x $20 = $10.00 |

**Manufacturing overhead costs:**

| | |
|---|---|
| Second shift premium: | 10,000 hours x $ 1.00 = $10,000 |
| Third shift premium: | 10,000 hours x $ 2.00 = $20,000 |
| Overtime premium: | 6,000 hours x $10.00 = $60,000 |

**21. a. Mfg., Mer., Ser.**
**b. Mer.**
**c. Mfg., Mer.**
**d. Mfg., Mer.**
**e. Mfg.**
**f. Mfg.**
**g. Ser.**
**h. Mfg., Mer., Ser.**
**i. Mfg., Ser.**

**22. a. high**
**b. low**
**c. high**
**d. high**
**e. low**
**f. high**
**g. high**
**h. high**
**i. moderate**
**j. moderate or low**

**23. a.**

| | | |
|---|---|---|
| Work in Process Inventory | 1,500 | |
| Selling and Administrative Expense | 2,000 | |
| Materials/Supplies Inventory | | 3,500 |
| *Used direct and indirect materials* | | |

**b.**

| | | |
|---|---|---|
| Fixed Overhead Control | 605,000 | |
| Accumulated Depreciation – laptops | | 605,000 |
| *To record depreciation on laptops* | | |

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| | | | |
|---|---|---|---|
| **c.** | **Administrative Expense** | **1,620,000** | |
| | **Fixed Overhead Control** | **180,000** | |
| | **Accumulated Depreciation – building** | | **1,800,000** |
| | ***To record depreciation on NY building*** | | |
| **d.** | **Work in Process** | **750,000** | |
| | **Salaries Payable** | | **750,000** |
| | ***To record accrued partner salaries*** | | |
| **e.** | **Work in Process** | **1,000,000** | |
| | **Salaries Payable** | | **1,000,000** |
| | ***To record accrued staff salaries*** | | |
| **f.** | **Work in Process** | **3,000,000** | |
| | **Salaries Payable** | | **3,000,000** |
| | ***To record accrued manager salaries*** | | |
| **g.** | **Work in Process** | **1,800,000** | |
| | **Various payables** | | **1,800,000** |
| | ***To record travel costs*** | | |
| **h.** | **Administrative Expense** | **95,000** | |
| | **Fixed Overhead Control** | **855,000** | |
| | **Insurance and Property Tax Payable** | | **950,000** |
| | ***To record insurance and tax on downtown building*** | | |

**24. a. Direct labor is labor that can be specifically identified with, or physically traced to, a cost object or finished product in an economically feasible manner (e.g., the labor of machine operators in a production environment). Indirect labor is all factory labor that is not classified as direct labor.**

**b. Certain nonproductive time may be a normal and unavoidable part of total labor time. In such cases, a pro rata share of nonproductive time should be classified as direct labor time. In many cases, nonproductive time is classified as indirect labor because it cannot be specifically identified with a cost object. For example, the amount of downtime usually cannot be specifically identified with a specific cause or particular cost object; it may result from a parts shortage or a broken machine. When there is a shortage of work and employees would therefore be idle, this time can be used for training.**

**c. <u>Direct labor</u>: The items classified as direct labor can usually be specifically identified with a quantity of labor. Furthermore, other direct costs, such as payroll taxes, are incurred by the organization because of its use of labor.**

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**Manufacturing overhead: The items classified as manufacturing overhead usually cannot be specifically identified with direct labor quantities.**

**Either direct labor or manufacturing overhead: Some cost items can be classified as either direct labor or manufacturing overhead, depending on the size of the cost object. For example, for very large projects employee time can be easily associated with the projects (e.g., time of specific managers, engineers, draftspersons, janitors, material handlers). Therefore, all costs associated with these employees can be classified as direct labor costs. For smaller cost objects, such as a variety of products or subassemblies, costs are more difficult to identify with the cost objects, and, therefore, they are classified as manufacturing overhead.**

**d. The quantity of labor hours that should be included as direct labor or manufacturing overhead reflects a measure of activity. The activity that was performed was either directly related to the product or indirectly related (or not easily traceable) to the product. The dollar amount assigned measures the cost of the activity. Wages and salaries are not necessarily directly tied to production activity. For example, assume a direct labor employee makes $8 per hour and time-and-a-half for overtime. This employee's activity is no different during the overtime hours – only the wage rate differs. Thus, measurement of activity and measurement of cost must be separated.**

**25. a.**

**Cuckoo Custom Clocks**
**Cost of Goods Sold Schedule**
**For the Month Ended August 31, 2006**

| | |
|---|---|
| Beginning finished goods | $ 250,000 |
| Cost of goods manufactured | 4,546,000* |
| Cost of goods available for sale | $4,796,000** |
| Ending finished goods | (211,000) |
| Cost of goods sold | $4,585,000 |

** $4,600,000 + $196,000 = $4,796,000
* $4,796,000 - $250,000 = $4,546,000

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**b.**

**Cuckoo Custom Clocks**
**Cost of Goods Manufactured Schedule**
**For the Month Ended August 31, 2006**

| | | |
|---|---|---|
| Beg. work in process | | $ 180,000 |
| Direct materials: | | |
| Beg. direct materials | $ 60,000 | |
| Direct materials purchased | 1,537,000 | |
| Direct materials available | 1,597,000 | |
| End direct materials | (84,000) | |
| Direct materials used | | 1,513,000 |
| Direct labor | | 900,000 |
| Overhead | | 2,025,000** |
| Total costs to account for | | 4,618,000* |
| End. work in process ($180,000 x .40) | | (72,000) |
| Cost of goods manufactured | | $4,546,000 |

*Total costs to account for = $4,546,000 + $72,000 = $4,618,000
**Total costs to account for = Beg. WIP + DM used + DL + OH
$4,618,000 = $180,000 + $1,513,000 + DL + OH
DL + OH = $4,618,000 - $180,000 - $1,513,000
DL + OH = $2,925,000
OH = 225% of DL = 2.25 DL
DL + 2.25 DL = $2,925,000
3.25 DL =$2,925,000
DL = $900,000
OH = $900,000 x 2.25 = $2,025,000

**c.** Prime cost = DM + DL
= $1,513,000 + $900,000
= $2,413,000

**d.** Conversion cost = DL + OH
= $900,000 + $2,025,000
= $2,925,000

**26.**

| | | |
|---|---|---|
| Direct labor ($42,000 + $12,000) | | $54,000 |
| Overhead: | | |
| Supplies ($3,600 - $1,600) | $2,000 | |
| Utilities ($1,800 x 0.80) | 1,440 | |
| Office salaries ($5,200 x 0.20) | 1,040 | |
| Depreciation | 1,200 | |
| Building rental | 980 | 6,660 |
| Cost of services rendered | | $60,660 |

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**27. a.**

| | | |
|---|---|---|
| Beginning WIP | | $ 136,000 |
| Direct materials used | $256,000 | |
| Direct labor | 423,000 | |
| Factory overhead | 232,000 | 911,000 |
| | | $1,047,000 |
| Ending WIP | | (168,000) |
| Cost of goods manufactured | | $ 879,000 |

Note: The beginning and ending balances of RM are not used because no information is given on purchases for the month.

**b.**

| | |
|---|---|
| Beginning FG | $ 62,000 |
| Cost of goods manufactured | 879,000 |
| Cost of goods available for sale | 941,000 |
| Ending FG | (48,000) |
| Cost of goods sold | $893,000 |

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# PROBLEMS

**28.**

| Cost | Variable | Fixed | Direct | Indirect | Period | Product |
|---|---|---|---|---|---|---|
| Paint | X | | X | | | X |
| Spirits | X | | X | | | X |
| Brushes | X | | X | | | X |
| Overalls | | X | | X | | X |
| Ad | | X | | | X | |
| Assistant | X | | X | | | X |
| Oper. Costs* | X | | | X | | X |
| Map | | X | | X | | X |
| Tolls | X | | X | | | X |
| Bid | | | | | X | |
| Phone | X | | | | X | |

*Some variable costs would be direct if miles to and from particular jobs are recorded.

**29.** **a.** At 40,000 boxes per month:

| | | | |
|---|---|---|---|
| Material and labor costs: | $104,000/500 | = | $208.00 |
| Overhead: | $408,000/40,000 | = | + 10.20 |
| Total cost per box | | | $218.20 |

**b.** At 60,000 boxes per month:

| | | | |
|---|---|---|---|
| Material and labor costs: | $104,000/500 | = | $208.00 |
| Overhead: | $408,000/60,000 | = | + 6.80 |
| Total cost per box | | | $214.80 |

**c.**

| | | |
|---|---|---|
| Materials and labor (excluding labor design) | = | $128.00 |
| Overhead | | + 6.80 |
| Total | | $134.80 |

| | |
|---|---|
| Cost at 40,000 boxes | $218.20 |
| Cost at 60,000 boxes (excluding labor design) | +134.80 |
| Labor design costs | $ 83.40 |

**d.** At 40,000 boxes:

| | |
|---|---|
| Sales $300(40,000 boxes) | $12,000,000 |
| Cost of sales $218.20 (40,000 boxes) | (8,728,000) |
| Gross margin | $ 3,272,000 |

| | |
|---|---|
| Target gross margin | $ 3,272,000 |
| Cost of sales $214.80 (60,000 boxes) | + 12,888,000 |
| Sales needed | $16,160,000 |

$16,160,000 ÷ 60,000 boxes = $269.33

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**e.** **No, the variable costs per box are constant and the fixed costs remain the same in total at any level of production.**

**30.**
**1. C**
**2. H**
**3. D**
**4. L**
**5. E**
**6. G**
**7. A**
**8. F**
**9. J**

**31. a.** **If GP rate is 35% of sales, then CGS is 65% of sales.**
**CGS = .65($1,908,000) = $1,240,200**

**b.**

| | | |
|---|---|---|
| **Direct material used** | | **$ 596,000** |
| **Direct labor** | | **430,000** |
| **Overhead:** | | |
| **Indirect labor** | **$124,000** | |
| **Factory insurance** | **4,000** | |
| **Factory utilities** | **28,600** | |
| **Factory depreciation** | **43,400** | |
| **Factory rent** | **168,000** | **368,000** |
| **Total costs to account for** | | **1,394,000** |
| **Ending WIP** | | **(61,000)** |
| **Cost of goods manufactured** | | **$1,333,000** |

**c.** **S & A expenses = Gross margin – Net income**
**= ($1,908,000 x 0.35) - $100,600**
**= $567,200**

**d.**

| | | |
|---|---|---|
| **Direct materials inventory** | **740,000** | |
| **Accounts payable** | | **740,000** |
| ***Direct materials purchased on account*** | | |
| **Work in process inventory** | **596,000** | |
| **Direct materials inventory** | | **596,000** |
| ***Materials requisitioned to production*** | | |
| **Work in process inventory** | **430,000** | |
| **Accrued wages payable** | | **430,000** |
| ***Accrued direct labor payroll*** | | |

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| | | |
|---|---|---|
| **Overhead control** | **124,000** | |
| **Accrued wages payable** | | **124,000** |
| ***Accrued indirect payroll costs*** | | |
| **Overhead control** | **4,000** | |
| **Prepaid insurance** | | **4,000** |
| ***Expiration of factory prepaid insurance*** | | |
| **Overhead control** | **28,600** | |
| **Cash** | | **28,600** |
| ***Paid factory utilities*** | | |
| **Overhead control** | **43,400** | |
| **Accumulated depreciation** | | **43,400** |
| ***Depreciation on factory equipment*** | | |
| **Overhead control** | **168,000** | |
| **Cash** | | **168,000** |
| ***Paid factory rent*** | | |
| **Work in process** | **368,000** | |
| **Overhead control** | | **368,000** |
| ***To apply actual overhead to WIP (see part b)*** | | |
| **Finished goods inventory** | **1,333,000** | |
| **Work in process inventory** | | **1,333,000** |
| ***Transfer completed production to finished goods (see part b)*** | | |
| **Cost of goods sold** | **1,240,200** | |
| **Finished goods inventory** | | **1,240,200** |
| ***To record cost of goods sold (see part a)*** | | |
| **S & A expenses** | **567,200** | |
| **Accounts payable (or cash)** | | **567,000** |
| ***To record selling and administrative expense (see part c)*** | | |
| **Accounts receivable** | **1,908,000** | |
| **Sales** | | **1,908,000** |
| ***To record sales on account*** | | |

**32. a. $740,000 ÷ $3,700 = 200 units sold**
**Units completed = units sold + units in ending FG**
**= 200 + 30 = 230 units completed**

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**b.** **Direct materials used** **$414,000**
**Direct labor** **236,000**
**Overhead:**
**Indirect labor** **$90,600**
**Insurance** **6,000**
**Utilities** **17,800**
**Depreciation** **35,800** **150,200**
**Total manufacturing costs** **800,200**
**WIP ending** **(111,000)**
**Cost of goods manufactured** **$689,200**

**c.** **$689,200 ÷ 230 units = $2,997 (rounded)**

**d.** **200 x $2,997 = $599,400**

**e.** **Sales – CGS = GM**
**$740,000 - $599,400 = $140,600**

**33.** **a.** **1.** **Work in process inventory** **430,000**
**Raw materials inventory** **430,000**
***Direct materials requisitioned to production***

**2.** **Work in process inventory** **1,120,000**
**Cash (70,000 x $16)** **1,120,000**
***Paid direct labor payroll***

**3.** **Variable overhead control** **155,000**
**Wages payable (15,500 x $10)** **155,000**
***Accrued indirect labor costs***

**4.** **Fixed overhead control** **55,000**
**Accumulated depreciation** **55,000**
***Depreciation on factory assets***

**5.** **Fixed overhead control** **28,000**
**Cash** **28,000**
***Paid supervisors' salaries***

**6.** **Variable overhead control** **19,200**
**Supplies inventory** **19,200**
***Indirect materials requisitioned***

**7.** **Work in process inventory** **257,200**
**Variable overhead control** **174,200**
**Fixed overhead control** **83,000**
***To apply actual overhead to work in process***

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| | | |
|---|---|---|
| 8. Finished goods inventory | 1,680,000 | |
| Work in process inventory | | 1,680,000 |

| | |
|---|---|
| b. Beginning balance | $ 107,560 |
| Direct materials | 430,000 |
| Direct labor | 1,120,000 |
| Overhead | 257,200 |
| | 1,914,760 |
| Goods completed | (1,680,000) |
| Ending balance | $ 234,760 |

**Work in process**

| | |
|---|---|
| BB 107,560 | 1,680,000 (8 |
| 1) 430,000 | |
| 2) 1,120,000 | |
| 3) 257,200 | |
| EB 234,760 | |

34. a.

**Oprah Tubbs' Collectibles**
**Schedule of Cost of Goods Manufactured**
**For the Month Ended July 31, 2006**

| | | |
|---|---|---|
| Beg. work in process | | $ 73,200 |
| Beg. raw materials | $ 34,800 | |
| Raw materials purchased | 164,000 | |
| Raw materials available | 198,800 | |
| End. raw materials | (46,600) | |
| Raw materials used | 152,200 | |
| Indirect materials used | (47,800)* | |
| Direct materials used (given) | | 104,400 |
| Direct labor ($197,000 x 0.85) | | 167,450 |
| Overhead: | | |
| Various (given) | $150,000 | |
| Indirect materials (from above) | 47,800 | |
| Indirect labor ($197,000 x 0.15) | 29,550 | 227,350 |
| Total costs | | 572,400 |
| End. work in process | | (60,000) |
| Cost of goods manufactured | | $512,400 |

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**Raw Materials Inventory**

| | | |
|---|---|---|
| BB | 34,800 | 104,400 Issued direct |
| Purch | 164,000 | 47,800 Issued indirect (plugged) |
| End | 46,600 | |

**b.**

**Oprah Tubbs' Collectibles**
**Schedule of Cost of Goods Sold**
**For the Month Ended July 31, 2006**

| | |
|---|---|
| Beg. finished goods | $ 36,000 |
| Cost of goods manufactured | 512,400 |
| Goods available for sale | 548,400 |
| End. finished goods | (52,400) |
| Cost of goods sold | $496,000 |

**35. a.** Cost of goods sold for the 1st 18 days of June:
$460,000 x (1 – 0.30) = $322,000

Cost of goods sold for the 1st 18 days of June:

| | |
|---|---|
| Beg. finished goods | $ 58,000 |
| Cost of goods manufactured | 349,000** |
| Goods available for sale | 407,000* |
| End. finished goods | (85,000) |
| Cost of goods sold | $322,000 |

*CGA = $322,000 + $85,000 = $407,000
**CGM = $407,000 - $58,000 = $349,000

Cost of goods manufactured for the 1st 18 days of June:

| | |
|---|---|
| Beg. work in process | $ 96,000 |
| DM | 152,000 |
| DL | 88,000 |
| OH | 84,000 |
| Total costs to account for | $420,000 |
| Less end. work in process | (71,000)*** |
| Cost of goods manufactured | $349,000 |

***End. work in process = $420,000 - $349,000 = $71,000

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**b. The insurance company would want to substantiate the quantity and cost of the inventory. The company would require nonfinancial records including labor, material, and production. The insurance company might also require some verification of the market value (current value or replacement value) of the inventory. Further, it might require the company to substantiate the number of units in the WIP inventory and the average percentage of completion. The market value data could be obtained from industry publications and the unit data might be obtained from production records or internal receiving and shipping documents.**

**36. a. – b.**

**Raw Materials Inventory**

| | | | |
|---|---|---|---|
| BB | 24,000 | 40,400 Issued direct (#2) | |
| Purch(#1) | 190,000 | 5,000 Issued indirect (#2) | |
| End Bal | 168,600 | | |

**Work in Process Inventory**

| | | | |
|---|---|---|---|
| BB | 36,000 | CGM | 177,380 |
| #2) DM | 40,400 | | |
| #2) IM | 5,000 | | |
| #3) DL | 60,000 | | |
| #3) IL | 14,000 | | |
| #5) Util. | 9,380 | | |
| #6) Depr. | 16,000 | | |
| #7) Rent | 13,200 | | |
| End. bal | 16,600 | | |

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**Finished Goods Inventory**

| | | | |
|---|---|---|---|
| BB | 8,000 | 167,580 | CGS |
| CGM | 177,380 | | |
| End bal | 17,800 | | |

**Total product cost = Cost of goods manufactured = $177,380**
**Period costs for August (all on income statement):**

| | |
|---|---|
| Office salaries expense (#4) | $48,200 |
| Utilities expense (#5) | 4,020 |
| Depreciation expense (#6) | 4,000 |
| Rent expense (#7) | 8,800 |
| Total period cost | $65,020 |

**37. a.** **To remain competitive in the global marketplace, businesses must control costs. Provision of health care is creating a crisis for American businesses. In many cases, health care costs are twice as high for U.S. industries as for their foreign competitors. There is nothing unethical about businesses being concerned about these costs and seeking ways to control them. Before cutting coverage, businesses have an ethical obligation to identify alternatives. For example, emerging alternatives include managed health care, sharing insurance premiums with employees, and forming alliances with other businesses to directly contract for health care services. Businesses should be careful to gather employee input on solutions before making any decisions that will adversely affect health care coverage.**

**b.** **There are no correct or incorrect answers to this question. It is expected that each student will have a relatively unique ranking of the alternatives. This subpart is intended to demonstrate to the students how difficult it is to cut health care insurance coverage because each worker has different needs and different priorities.**

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**c. By bringing some health care services in-house, a firm can replace a portion of the variable costs (per employee) with fixed costs. A company may be able to achieve similar benefits by directly contracting with health care service providers on a (partly) fixed fee basis. Likewise, companies can implement health awareness campaigns and provide fitness facilities that will generate long-term health benefits and lower health care costs. Such approaches will result in an increase in fixed costs and lower variable costs.**

**38. a. 1. The benefits of outsourcing the financing function include possibly higher quality service by using world-class service vendors, lower costs due to reduced staffing requirements, and the ability to redeploy internal resources to other areas.**

**The drawbacks may consist of loss of competency in a crucial operational area, loss of flexibility, loss of personal associations with sources of capital, and loss of reputation. There could also be a loss of talent that would be required to execute certain organizational strategies. For example, a strategy that depends on mergers and acquisitions may require a very competent internal staff to determine optimal finance arrangements.**

**2. The benefits of outsourcing data-processing include lower operating costs, faster processing because of the vendor's use of advanced technology, and the ability to redeploy internal technology to other uses.**

**The drawbacks of outsourcing data-processing include loss of control over a potentially vital resource (information) and loss of competency in a vital area. Also, the company may lose economies of scale in technology acquisition assuming computer-based technology could be acquired to support data-processing and other functions such as product design and engineering.**

**3. Outsourcing travel arrangements would have the effect of reducing the fixed costs associated with staffing a travel office. This should cause total costs of travel to decline. A greater variety of travel vendors may be accessed by outsourcing.**

**The drawbacks associated with outsourcing travel arrangements would include some loss of flexibility in determining travel arrangements, loss of some control over determining which firms provide travel services (e.g., which airline is used), and possibly higher variable travel costs. Also, it may be more difficult to develop long-term initiatives to lower travel costs.**

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**b. Outsourcing manufacturing would result in much of the costs of prevention, appraisal, and failure being buried in the purchase price of the outsourced product. An important consideration would be that the company would lose some control over quality expenditures. If the vendor spends heavily on failure prevention, the customer will also spend heavily on failure prevention (because this cost must be recovered in the selling price); if the vendor fails to invest in prevention, the customer will spend heavily on appraisal (and therefore internal failure costs) or external failure costs.**

**c. The biggest impact on corporate culture would be determined by how management dealt with the internal workers who were displaced by the outsourcing. If the workers were simply fired, a climate of mistrust would be created between the remaining workers and managers. Workers who were not displaced would be fearful that their jobs offered no security. The consequence would be low morale and high turnover. However, if the workers were retrained and then redeployed in the firm, the culture could change in a positive way. By keeping the workers, management would be signaling to the workers that they are valued and that managers are willing to retrain workers as competitive conditions change. Workers would then be more willing to accept change (and changes are inevitable). Working to develop a culture that accepts changes could provide a competitive advantage.**

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