

## True/False

1. Goal congruence exists when managers base decisions on their own best interests and achieve the organizational goals established by top management in doing so.
2. An organization where high-level managers have the responsibility for making decisions and are enabled to make decisions quickly has a competitive advantage.
3. In management, an experienced pool of talent results from the responsibility placed or given to individual managers.
4. Products transferred between subunits within an organization are considered intermediate products.
5. Department A charges Department B \$1,350 for copying services provided. The \$1,350 is considered a transfer price.
6. Examples of market-based transfer prices include variable manufacturing costs, full manufacturing costs, and full product costs.
7. Negotiated transfer prices are transacted at the top management levels.
8. When the intermediate market is perfectly competitive, interdependencies of subunits are minimal, and there are additional costs to the corporation as a whole in using the market instead of transacting internally.
9. Full-cost transfer prices are adequate and lead to goal congruence for decisions that require knowledge of short-run variable costs.
10. Full-cost transfer pricing may be used because it yields relevant costs for short-run decisions even though full-cost allocations may lead to poor long-run decisions.
11. There is seldom a dual transfer price that simultaneously meets the criteria of goal congruence, management effort, and subunit autonomy.
12. Some companies use single transfer pricing, using two separate transfer-pricing methods to price each interdivisional transaction.
13. Outlay costs are defined as the maximum contribution foregone by the supply division if the products or services are transferred internally.
14. Opportunity costs represent the cash flows directly associated with the production and transfer of the products and services.
15. Additional factors that arise in multinational transfer pricing include tariffs and customs duties levied on imports of products into a country.
  
16. Which of the following is NOT a characteristic of a management control system?
  - a. It aids and coordinates the process of making decisions.
  - b. It encourages short-term profitability.
  - c. It motivates individuals throughout the organization to act in concert.
  - d. It coordinates forecasting sales and cost-driver activities, budgeting, and measuring and valuating performance.
  
17. The management control system is distinguished from a financial accounting system by its focus on all of the following EXCEPT

- a. generally accepted accounting principles.
  - b. organizational goals and objectives.
  - c. internal management decision making.
  - d. motivation and evaluation of performance consistent with the organization's goals.
18. In which of the following situations would costs most likely exceed the benefits of a decentralized system and negatively impact the organization?
- a. when the organization is horizontally integrated
  - b. when the organization is vertically integrated
  - c. when competition does not exist for the organization's direct materials
  - d. when inter-divisional transfers are present
19. Which of the following statements is FALSE?
- a. A centralized structure does not empower employees to handle customer complaints directly.
  - b. A decentralized structure forces top management to lose some control over the organization.
  - c. Decentralization slows responsiveness to local needs for decision making.
  - d. The extent to which decisions are pushed downward and the types of decisions which are pushed down provide a measure of the level of centralization/decentralization in an organization.
20. The ability for managers to act quickly and decisively in an organization is known as
- a. demand gain.
  - b. demand satisfaction.
  - c. flexibility gain.
  - d. supply gain.
21. A product may be passed from one subunit to another subunit in the same organization. The product is known as
- a. an interdepartmental product.
  - b. an intermediate product.
  - c. a subunit product.
  - d. a transfer product.
22. All of the following criteria may be used to choose a transfer-pricing method EXCEPT
- a. promotion of quality products.
  - b. promotion of a sustained high level of management effort.
  - c. promotion of a high level of subunit autonomy.
  - d. promotion of goal congruence.

23. A transfer pricing method leads to goal congruence when
- managers always act in their own best interest.
  - managers act in their own best interest and the decision is in the long-term best interest of the manager's subunit.
  - managers act in their own best interest and the decision is in the long-term best interest of the company.
  - managers act in their own best interest and the decision is in the short-term best interest of the company.
24. All of the following are general methods for determining transfer prices EXCEPT
- cost-based transfer prices.
  - market-based transfer prices.
  - negotiated transfer prices.
  - subunit transfer prices.
25. Negotiated prices are typically used when which of the following circumstances exists?
- Market prices fall and rise in an unusual manner.
  - Both subunits freely agree on the initial price discussed.
  - Market prices are high.
  - Market prices are low.

26 - 30. Blackoil Corp. has two divisions, Refining and Production. The company's primary product is Clean Oil. Each division's costs are provided below:

Refining:	Variable costs per gallon of oil	\$30
	Fixed costs per gallon of oil	\$24
Production:	Variable costs per gallon of oil	\$ 6
	Fixed costs per gallon of oil	\$ 4

The Production Division is able to sell the oil to other areas for \$24 per gallon. The Refining Division has been operating at a capacity of 80,000 barrels a day, using oil from the Production Division and oil purchased from other suppliers. The Refining Division usually purchases 50,000 barrels of oil, on average, from the Production Division and 30,000 barrels, on average, from other suppliers at \$40 per barrel.

26. What is the transfer price per barrel from the Production Division to the Refining Division, assuming the method used to place a value on each barrel of oil is 175% of variable costs?
- \$10.50
  - \$12.00
  - \$17.50
  - \$24.50

27. What is the transfer price per barrel from the Production Division to the Refining Division, assuming the method used to place a value on each barrel of oil is 120% of full costs?
- a. \$16.80
  - b. \$12.00
  - c. \$ 9.50
  - d. \$ 7.20
28. What is the transfer price from production to refining if the market price method of pricing is used?
- a. \$24
  - b. \$32
  - c. \$36
  - d. \$40
29. What is the Production Division's operating income per 200 barrels of oil reported under the 175% of variable costs method?
- a. \$1,500
  - b. \$ 880
  - c. \$ 100
  - d. \$ (100)
30. What is the Refining Division's operating income if 150 barrels of oil are sold at \$110 each, and 200 barrels are transferred in?
- a. \$16,500
  - b. \$15,600
  - c. \$ 8,400
  - d. \$ 7,500
31. When transfer prices are being set,
- a. it is more difficult to set a price when the seller is a profit center.
  - b. it is easy to determine an acceptable price when the seller is an investment center.
  - c. there is little difficulty determining a price when the seller is a cost center.
  - d. customers' demands should be considered when choosing a price level.
32. Division A sells soybean paste internally to Division B, which, in turn, produces soybean burgers that sell for \$5 per pound. Division A incurs costs of \$0.75 per pound, while Division B incurs additional costs of \$2.50 per pound.

What is Division A's operating income per pound, assuming the transfer price of the soybean paste is set at \$1.25 per pound?

- a. \$0.500
- b. \$0.875
- c. \$1.250
- d. \$1.625

33 - 34. Division A sells soybean paste internally to Division B, which, in turn, produces soybean burgers that sell for \$5 per pound. Division A incurs costs of \$0.75 per pound, while Division B incurs additional costs of \$2.50 per pound.

33. What is Division B's operating income per pound, assuming the transfer price of the soybean paste is set at \$1.25 per pound?

- a. \$0.500
- b. \$0.875
- c. \$1.250
- d. \$1.625

34. Which of the following formulas correctly reflects the company's operating income?

- a.  $\$5.00 - (\$0.75 + \$2.50) = \$1.75$
- b.  $\$5.00 - (\$1.25 + \$2.50) = \$1.25$
- c.  $\$5.00 - (\$0.75 + \$3.75) = \$0.50$
- d.  $\$5.00 - (\$0.25 + \$1.25 + \$3.50) = 0$

35. Transfer pricing allocates profits to subunits for

- a. employee analyses.
- b. fixed-cost analyses.
- c. performance evaluation.
- d. product costing.

36. Which of the following statements is TRUE?

- a. Companies set transfer prices in order to evaluate individual performances.
- b. Companies do not worry about high-tax jurisdictions.
- c. Companies want to set transfer prices so as to maximize profits reported to low-tax jurisdictions.
- d. Companies want to set transfer prices so as to maximize profits in high-tax jurisdictions.

37. All of the following should be considered when determining transfer pricing EXCEPT

- a. income or dividend payment restrictions.
- b. international taxation.
- c. material costs.
- d. tariffs.

38. Which of the following plans should be implemented assuming Tails Company wants to maximize the amount of income received from the division in Bulgaria, a country that places restrictions on the amount of funds that may be transferred outside their national border?

- a. Maximize the transfer price of goods transferred out of Bulgaria.
- b. Maximize the transfer price of goods transferred into Bulgaria.
- c. Minimize the transfer price of goods transferred out of Bulgaria.
- d. Minimize the transfer price of goods transferred into Bulgaria.

39. Optimal corporate decisions are made

- a. when goods or services are transferred at market prices.
- b. when goods or services are transferred at full cost prices.
- c. when goods or services are transferred at variable cost prices.
- d. when goods or services are transferred at fixed cost prices.

40. When market prices drastically drop below their historical average temporarily, all of the following transfer-pricing methods may be used to evaluate performance EXCEPT

- a. distress prices.
- b. long-run average prices.
- c. normal market prices.
- d. short-run average prices.

41. When companies do not want to use market prices, or find it too costly, they typically use \_\_\_\_\_ prices, even though suboptimal decisions may occur.

- a. average-cost
- b. full-cost
- c. long-run cost
- d. short-run average cost

42-43. Crush Company makes internal transfers at 180% of full cost. The Soda Refining division purchases 30,000 containers of carbonated water per day, on average, from a local supplier, who delivers the water for \$30 per container via an external shipper. In order to reduce costs, the company located an independent producer in Missouri who is willing to sell 30,000 containers at \$20 each, delivered to Crush Company's shipping division in Missouri. The company's Shipping Division in Missouri has excess capacity and can ship the 30,000 containers at a variable cost of \$2.50 per container.

42. What is the total cost to Crush Company if the carbonated water is purchased from the local supplier?

- a. \$ 900,000
- b. \$1,200,000

- c. \$1,501,000
- d. \$1,620,000

43. What is the total cost of purchasing the water from the Missouri supplier and shipping it to the Soda Division?

- a. \$ 600,000
- b. \$ 675,000
- c. \$1,080,000
- d. \$1,215,000

44. One reason companies use full-cost transfer pricing is that it provides

- a. relevant costs for long-run decisions even though poor short-run decisions may result.
- b. relevant costs for long-run decisions and for short-run decisions.
- c. relevant costs for short-run decisions and even though poor long-run decisions may result.
- d. relevant costs for short-run decisions at the expense of the company.

45. Advantages cited by managers as reasons to use full-product costs include all of the following EXCEPT

- a. fixed cost recovery.
- b. increased long-run price fixing.
- c. less long-run price cutting.
- d. price stability.

46. Full-cost transfer prices are preferred when transferring products from divisions operating

- a. in a low tax area to a high tax area.
- b. in a high tax area to a low tax area.
- c. between high tax areas.
- d. between low tax areas.

47. In analyzing transfer prices,

- a. the buyer will not willingly purchase a product for less than the incremental costs incurred to manufacture the product internally.
- b. the seller will not willingly sell a product for less than the incremental costs incurred to make the product.
- c. the buyer will willingly pay more than the ceiling transfer price.
- d. the buyer will not pay less than the ceiling transfer price.

48. When companies are unable to choose a transfer-pricing method which meets their requirements, they may use

- a. cost pricing.
  - b. dual pricing.
  - c. situational pricing.
  - d. market pricing.
49. The pricing that reduces the goal-congruence problems associated with a pure cost-plus-based transfer pricing method is
- a. dual pricing.
  - b. market pricing.
  - c. single pricing.
  - d. transfer pricing.
50. The profit foregone by the seller if the products or services are transferred internally instead of selling them externally are called
- a. additional costs.
  - b. opportunity costs.
  - c. outlay costs.
  - d. transfer costs.
51. The seller of product A has no idle capacity and can sell all it can produce at \$20 per unit. Outlay cost is \$4. What is the opportunity cost, assuming the seller sells internally?
- a. \$ 4
  - b. \$16
  - c. \$20
  - d. \$24
52. The seller of product A has idle capacity and has no alternative use for the excess capacity. The seller can sell each unit at \$10. Outlay cost is \$2. What is the opportunity cost of selling internally?
- a. \$ 0
  - b. \$ 8
  - c. \$10
  - d. \$12
- 53 - 55. Soft Cushion Company is highly decentralized. Each division is empowered to make its own sales decisions. The Assembly Division can purchase a key component - stuffing - from the Production Division or from external suppliers. The Production Division has been the major supplier of stuffing in recent years. The Assembly Division has announced that two external suppliers will be used to purchase the stuffing at \$20 per pound for the next year. The Production Division recently increased its unit price to \$40. The manager of the Production Division presented the following information - variable cost \$32, fixed cost \$8 - to top management in order

to attempt to force the Assembly Division to purchase the stuffing internally. The Assembly Division purchases 20,000 lbs. per month.

53. The Production Division has no alternative use for the facilities used to manufacture the stuffing. What is the monthly operating income advantage (disadvantage) if the goods are purchased internally?

- a. \$ 400,000
- b. \$ 640,000
- c. \$ 240,000
- d. \$(240,000)

54. What is the monthly operating advantage (disadvantage) of purchasing the goods internally, assuming the Production Division is able to utilize the facilities for other operations, resulting in monthly cash-operating savings of \$40,000?

- a. \$ 400,000
- b. \$ 40,000
- c. \$(240,000)
- d. \$(280,000)

55. What would be the monthly operating advantage (disadvantage) of purchasing the goods internally, assuming the external supplier increased its price to \$50 per pound and the Production Division is able to utilize facilities for other operations, resulting in a monthly cash-operating savings of \$30 per pound?

- a. \$1,000,000
- b. \$ 360,000
- c. \$ (240,000)
- d. \$ (400,000)

56. Overemphasis on any single subgoal or objective can easily create

- a. a focus on the short run, to the detriment of the long-run organizational goals.
- b. motivational problems with employees.
- c. performance measurement inequities.
- d. too many cost centers.

57. Subunits X and Y determined the price for interdepartmental services during the last monthly meeting. Market-price data were collected for the meeting. The prices set by the two departments are known as

- a. subunit transfer prices.
- b. negotiated transfer prices.
- c. market-based transfer prices.
- d. cost-based transfer prices.

58. The Transportation Division of Iowa Paint Company can purchase paint from an independent producer at \$18 per gallon. The company has three divisions: Production, Transportation, and Paint. The company's Transportation Division is currently buying paint from the Paint Division for \$24 per gallon. Transfer prices are based on 125 percent of full cost. The market-based transfer price per gallon is \$12.60. Which of the following would NOT occur if the company uses dual pricing to record the Transportation Division purchases of paint from the Paint Division?

- a. credit the Paint Division for \$22.50
- b. debit the corporate account for \$9.90
- c. debit the Transportation Division for \$12.60
- d. credit the Paint Division for \$12.60

59. For each of the following activities, characteristics, and applications, tell whether they are primarily labeled as being found in a centralized organization, a decentralized organization, or both types of organizations.

- a. Freedom for managers at lower organizational levels to make decisions
- b. Gathering information may be very expensive
- c. Greater responsiveness to user needs
- d. Have few interdependencies among divisions
- e. Maximum constraints and minimum freedom for managers at lowest levels
- f. Maximization of benefits over costs
- g. Minimization of duplicate functions
- h. Minimum of suboptimization
- i. Multiple responsibility centers with various reporting units
- j. Profit centers

60. For each of the following transfer price descriptions or operating situations, tell which of the general methods of transfer pricing it is probably categorized as:

- a. Bargaining between selling and buying units
- b. Budgeted costs
- c. 145% of full costs
- d. Internal product transfers are required if goods are available internally
- e. Manufacturing plus marketing plus distribution plus customer service costs
- f. Prices listed in a trade journal
- g. Selling price less normal sales commissions
- h. Variable manufacturing cost plus a mark-up

61. The Millwright Company has two divisions. The Lumber Division prepares timber at its sawmills. The Finishing Division prepares the cut lumber into finished wood for the furniture industry. No inventories exist in either division at the beginning of 19x1. During the year, the

Lumber Division prepared 80,000 cords of wood at a cost of \$480,000. All the lumber was transferred to the Finishing Division, where additional operating costs of \$5 per cord were incurred. The 800,000 boardfeet of finished wood were sold for \$2,000,000.

**Required:**

- a. Determine the operating income for each division if the transfer price from Lumber to Finishing is, at cost, \$6 a cord.
- b. Determine the operating income for each division if the transfer price is \$5 per cord.
- c. Since the Lumber Division has all of its sales internally to the Finishing Division, does the manager care what price is selected? Why? Should the Lumber Division be a cost center or a profit center under the circumstances?

62. Bedtime Bedding Company manufactures pillows. The Cover Division makes covers and the Assembly Division makes the finished products. The covers can be sold separately for \$5.00. The pillows sell for \$6.00. The information related to manufacturing for the most recent year is as follows:

Cover Division manufacturing costs	\$6,000,000
Sales of covers by Cover Division	4,000,000
Market value of covers transferred to Assembly	6,000,000
Sales of pillows by Assembly Division	7,200,000
Additional manufacturing of Assembly Division	1,500,000

**Required:**

Compute the operating income for each division and the company as a whole. Use market value as the transfer price. Are all managers happy with this concept? Explain.

63. Sportswear Company manufactures socks. The Athletic Division sells its socks for \$6 each to outsiders. Socks have manufacturing costs of \$2.50 each for variable and \$1.50 for fixed. The division's total fixed manufacturing costs are \$105,000 at the normal volume of 70,000 units. The European Division has offered to buy 15,000 socks at the full cost of \$4. The Athletic Division has excess capacity and the 15,000 units can be produced without interfering with the current outside sales of 70,000. The 85,000 volume is within the division's relevant operating range. Explain whether the Athletic Division should accept the offer.

64. Copperstone Company has two divisions. The Bottle Division produces products that have variable costs of \$3 per unit. Its sales were 150,000 to outsiders at \$5 per unit and 40,000 units to the Mixing Division at 140 percent of variable costs. Under a dual transfer pricing system, the Mixing Division pays only the variable cost per unit. The fixed costs of Bottle Division were \$125,000 per year. Mixing sells its finished products to outside customers for \$11.50 per unit. Mixing has variable costs of \$2.50 per unit, in addition to the costs from Bottle. The annual fixed costs of Mixing were \$85,000. There were no beginning or ending inventories during the year.

**Required:**

What are the operating incomes of the two divisions and the company as a whole for the year? Explain why the company's operating income is less than the sum of the two divisions' total

income.

65. The Brownshoe Company has three specialized divisions. The Casual Shoe Division has asked the Sole Division to supply it with a large quantity of soles. The Sole Division is currently at capacity. The Sole Division sells soles outside for \$5.00 each. The Casual Shoe Division, which is operating at 50 percent capacity, has offered to pay \$4.00 per sole. The Sole Division has a variable cost of \$3.60 per sole. The Casual Shoe Division has the following cost structure:

Direct materials, except soles	\$ 60.00
Soles	4.00
Conversion costs	36.00
Fixed overhead	<u>20.00</u>
Total cost per pair of shoes	\$120.00

The manager of Casual Shoe believes that the \$4 price from Sole is necessary if the division is to compete in the market for casual shoes.

**Required:**

- As manager of the Sole Division, would you recommend that your division supply the soles to Casual Shoe? Why?
- Would it be desirable for the division to supply Casual Shoe with the soles for \$4, assuming the Sole Division had excess capacity? Why?
- What would be the corporate position, assuming the Sole Division has excess capacity?

69. The president of Silicon Company has just returned from a week of professional development courses and is very excited that she will not have to change the organization from a centralized structure to a decentralized structure just to have responsibility centers. However, she is somewhat confused about how responsibility centers relate to centralized organizations where a few managers have most of the authority.

Explain how a centralized organization might allow for responsibility centers.

**ANSWERS**

- True
- False
- True
- True
- True
- False
- False
- False
- False
- False
- False
- False
- False
- True
- b
- a
- d
- c
- c
- b
- a
- c
- d
- a
- a  $1.75 \times \$6 = \$10.50$
- b  $1.20 \times (\$6 + \$4) = \$12.00$
- a \$24 ---- as given in the problem
- c

Revenues: ( $\$6 \times 1.75$ ) $\times$ 200 barrels =	\$2,100
Less: Div. Variable Costs: ( $\$6 \times 200$ ) =	(1,200)
Div. Fixed Costs: ( $\$4 \times 200$ ) =	<u>(800)</u>
	\$ 100

30. d

Revenues: (150 $\times$ \$110)	\$16,500
TI cost: ( $\$6 \times 150$ )	(900)
D. VC: (150 $\times$ \$30)	(4,500)
D. FC: (150 $\times$ \$24)	<u>(3,600)</u>
	\$ 7,500

31. a

32. a  $\$1.25 - 0.75 = \$0.50$

33. c  $\$5.00 - 3.75 = \$1.25$

34. a  $\$5.00 - (\$0.75 + \$2.50) = \$1.75$

35. c

36. c

37. c

38. b

39. a

40. d

41. b

42. a 30,000 containers  $\times$  \$30 = \$900,000

43. b 30,000 containers  $\times$  ( $\$2.50 + \$20.00$ ) = \$675,000

44. a

45. b

46. a

47. b

48. b

49. a

50. b

51. b  $\$20 - \$4 = \$16$

52. a

53. d

Purchase cost: (20,000 lbs. $\times$ \$20)	\$ 400,000
Outlay cost: (20,000 lbs. $\times$ \$32)	(640,000)
Opportunity cost:	<u>0</u>

Advantage/(Disadvantage)	\$ (240,000)
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54. d

Purchase cost: (20,000 lbs. x \$20)	\$ 400,000
Outlay cost: (20,000 lbs. x \$32)	(640,000)
Opportunity cost:	(40,000)
Advantage/(Disadvantage)	\$ (280,000)

55. c

Purchase cost: (20,000 lbs. x \$50)	\$1,000,000
Outlay cost: (20,000 lbs. x \$32)	(640,000)
Opportunity cost: (20,000 lbs. x \$30)	(600,000)
Advantage/(Disadvantage)	\$ (240,000)

56. a

57. b

58. d  $\$18 \times 1.25 = \$22.50$ ;  $\$22.50 - 12.60 = \$9.90$

- |                         |                   |
|-------------------------|-------------------|
| 59. a. decentralization | f. both           |
| b. decentralization     | g. centralization |
| c. decentralization     | h. both           |
| d. decentralization     | i. both           |
| e. centralization       | j. both           |
- 
- |                   |                 |
|-------------------|-----------------|
| 60. a. negotiated | e. cost-based   |
| b. cost-based     | f. market-based |
| c. cost-based     | g. market-based |
| d. any method     | h. cost-based   |

61. a.		Lumber	Finishing
Revenue		\$480,000*	\$2,000,000
Cost of services:	Incurred	\$480,000	\$ 400,000
	Transferred-in	0	480,000
Total		<u>\$480,000</u>	<u>\$ 880,000</u>
Operating income		\$0	<u>\$1,120,000</u>

\* 80,000 cords x \$6 = \$480,000

b.		Lumber	Finishing
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Revenue		\$400,000*	\$2,000,000
Cost of services:	Incurred	\$480,000	\$ 400,000
	Transferred-in	<u>0</u>	<u>400,000</u>
Total		\$480,000	\$ 800,000
Operating income		<u>\$(80,000)</u>	<u>\$1,200,000</u>

\* 80,000 cords x \$5 = \$400,000

c. The manager of Lumber cares about the transfer price if the division is a profit center but not if it is a cost center. Under the circumstances, the division probably should be a cost center and not worry about the profit it pretends to make by selling to another division.

62.		Cover	Assembly	Company
Revenue:	External	\$ 4,000,000	\$7,200,000	\$11,200,000
	Internal	<u>6,000,000</u>	<u>0</u>	<u>0</u>
Total		\$10,000,000	\$7,200,000	\$11,200,000
Cost of goods:	Incurred	\$ 6,000,000	\$1,500,000	\$ 7,500,000
	Transferred-in	<u>0</u>	<u>6,000,000</u>	<u>0</u>
Total		\$ 6,000,000	\$7,500,000	\$ 7,500,000
Operating income		<u>\$ 4,000,000</u>	<u>\$ (300,000)</u>	<u>\$ 3,700,000</u>

The Assembly manager is probably not happy because the division is showing a loss. The manager would probably argue for a transfer price at something less than cost. However, since the market is open and competitive, the market price can be justified. The division needs to either increase its price or reduce its costs if it expects to show a profit.

63. Sales \$4.00; Variable costs 2.50; Contribution margin \$1.50

The proposal should be accepted because it makes a contribution to fixed costs and profits of \$1.50 per unit. This would increase the division's operating income by \$22,500 (\$1.50 x 15,000 units).

64.		Bottle	Mixing	Company
Revenue:	External	\$750,000	\$460,000	\$1,210,000
	Internal*	<u>168,000</u>	<u>0</u>	<u>0</u>
Total		\$918,000	\$460,000	\$1,210,000
Variable costs:	Incurred	\$570,000	\$100,000	\$ 670,000
	Transferred-in	<u>0</u>	<u>120,000</u>	<u>0</u>
Total		\$570,000	\$220,000	\$ 670,000

Contribution margin	\$348,000	\$240,000	\$ 540,000
Fixed costs	<u>125,000</u>	<u>85,000</u>	<u>210,000</u>
Operating income	<u>\$223,000</u>	<u>\$155,000</u>	<u>\$ 330,000</u>

\*40,000 x \$3 x 1.40 = \$168,000

The internal sales are included in the company's statement because the company cannot sell to itself. Therefore, it has to swallow \$48,000 of dual pricing.

65. a. No, because production is at capacity and there is no need to lower the price. It would reduce our operating income, an undesirable outcome.

b. Yes, the variable costs are less than \$4, thereby providing a positive contribution margin.

c. The corporate position would be to require the internal sale because the company benefits from not having to buy from outside. As an incentive, the company might establish a dual pricing policy which would be acceptable to both managers.

69. It does not make any difference what type of organizational structure exists when it comes to defining responsibility centers. If a centralized organization desires to hold its managers responsible for their actions, it can design a reporting system that assigns all costs and revenues to their controllable managers. It's just that, in a centralized organization, each manager may have more items to control than are reasonably possible.