

	<u>Plastic Component</u>	<u>Video Card</u>
Direct materials	\$1.75	\$ 2.80
Direct labor	2.35	3.25
Variable manufacturing overhead	1.00	1.75
Fixed manufacturing overhead	<u>0.40</u>	<u>2.55</u>
Total cost	<u>\$5.50</u>	<u>\$10.35</u>

The Plastics division sells its commercial products at full cost plus a 40% markup. Its manager believes the proprietary plastic component that is made for the Entertainment division would sell for \$7.70 per unit on the open market. The market price of the video card the Entertainment division uses is \$10.98 per unit.

### Required

- If upper management requires the video card to be transferred from the Video Card division to the Entertainment division at full cost, what behavior will the transfer likely motivate in the Video Card division?
- If the Entertainment division can purchase a large quantity of comparable video cards from an outside source at \$8.95 per unit and the Video Card division has excess capacity, what transfer price should the Video Card division set? What could be the result of this action on Parkside's profit?
- If the Plastics department negotiated a transfer price of \$6.00 per unit with the Entertainment division, what behavior would the transfer be likely to motivate in both departments?

## Cases

### C&C Sports continuing case

**10.32 (LO 3) Return on investment** After seeing the results of the segment analysis for the Nylon Fibers division, James Cameron wants all three divisions focusing on the correct avenues for improving division performance. Refer to Exhibit 10.4 and the related information on page 10-14 to answer the following questions.

### Required

- Calculate the margin and asset turnover for Centex Yarns' three divisions. Show that margin  $\times$  asset turnover equals the return on investment for each division as reported in the text.
- Compare the margin and asset turnover for the three divisions and make suggestions for increasing the return on investment of each division.

**10.33 (LO 2, 3, 4, 5) Comprehensive case** Thompson Manufacturing has been in business for over 50 years, making a variety of consumer electronics products. Mary Felix recently joined the business as vice president of the Conley division, one of the company's newest divisions. During her first week on the job, Mary met with CEO Mitch Thompson to discuss the division's future.

"I know we're one of the newest and smallest divisions in the company," Mary said, "but I think we're in a position to realize some dramatic growth through product line expansion. We've got a full pipeline of products under development, and I'd like to speed up development of a couple of those products. If we work hard, I think we can have the new express charger ready for release by the end of the year."

Mitch thought for a minute and then replied. "That sounds like a good idea, Mary. I just don't want you to move so fast that you don't have a good understanding of how the introduction of the new product will affect the division's performance. Remember, I'm a big fan of maintaining our return on investment."

Mary went back to her office after the meeting and began to review the express charger. At a sales price of \$10 per unit, the marketing department estimates demand for the product at 50,000 units. The division will need to purchase a new machine for \$100,000 to produce the charger. Mary also estimates that the division will incur an additional \$150,000 in fixed costs that are directly attributable to the charger.

One component of the charger is currently produced by Thompson's Amber division at a variable cost of \$4 per unit. The component is sold to outside customers for \$6 per unit. Mary had met with Caroline Smith, vice president of the Amber division, earlier in the week to discuss the possibility of the