

1. award: 2 points

Mission Electronics manufactures and sells basic DVD players for sale under various generic store brand names. The cost of one of their models follows:

Materials	\$ 18.00
Labor	12.00
Variable overhead	5.00
Fixed overhead (\$2,700,000 per year; 450,000 units per year)	6.00
	\$ 41.00
Total	\$ 41.00

Pacific Cash & Carry, a chain of low-price electronic sales and rental outlets, has asked Mission to supply them with 30,000 players for a special promotion Pacific is planning. Pacific has offered to pay Mission a unit price of \$42 per DVD player. The regular selling price is \$60. The special order would require some modification to the basic model. These modifications would add \$4.00 per unit in material cost, \$1.50 per unit in labor cost, and \$0.50 in variable overhead cost. Although Mission has the capacity to produce the 30,000 units without affecting its regular production of 450,000 units, a one-time rental of special testing equipment to meet Pacific's requirements would be needed. The equipment rental would be \$45,000 and would allow Mission to test up to 50,000 units.

Required

(a) Prepare a schedule to show the impact of filling the Pacific order on Mission's profits for the year. **(Input all amounts as positive values. Enter your answers in thousands of dollars. Omit the "\$" sign in your response.)**

	All revenues and costs in thousands of dollars		
	Status Quo 450,000 Units	Alternative 480,000 Units	Difference
Sales revenue	\$ 27000	\$ 28,260	\$ 1260 higher
Less variable costs:			
Materials	8100	8778	660 higher
Labor	5400	5805	405 higher
Variable overhead	2250	2415	165 higher
Total variable cost	\$ 15750	\$ 16998	\$ 1230 higher
Contribution margin	\$ 11250	\$ 11262	\$ 30 higher
Less fixed costs	2700	2745	45 higher

Operating profit	\$ <input type="text" value="8550"/>	\$ <input type="text" value="8517"/>	\$ <input type="text" value="15"/> lower
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(b) Would you recommend that Mission accept the order?

(c) What is the minimum quantity of DVD players in the special order that would make it profitable?

The minimum quantity of DVD players units

Worksheet

Learning Objective: 04-01 Use differential analysis to analyze decisions.

Difficulty: Medium

Learning Objective: 04-02 Understand how to apply differential analysis to pricing decisions.

2.

award:
1 point

Sid's Skins makes a variety of covers for electronic organizers and portable music players. The company's designers have discovered a market for a new clear plastic covering with college logos for a popular music player. Market research indicates that a cover like this would sell well in the market priced at \$21. Sid desires an operating profit of 20 percent of costs.

Required:

What is the highest acceptable manufacturing cost for which Sid's would be willing to produce the cover? **(Round your answer to 2 decimal places. Omit the "\$" sign in your response.)**

Highest acceptable manufacturing cost \$

Worksheet

Difficulty: Easy

Learning Objective: 04-03 Understand several approaches for establishing prices based on costs for long-run pricing decisions.

3.

award:
2 points

Mobility Partners makes wheelchairs and other assistive devices. For years it has made the rear wheel assembly for its wheelchairs. A local bicycle manufacturing firm, Trailblazers, Inc., offered to sell these rear wheel assemblies to Mobility. If Mobility makes the assembly, its cost per rear wheel assembly is as follows (based on annual production of 2,000 units):

Direct materials	\$ 25
Direct labor	53
Variable overhead	16
Fixed overhead	47
