Problem 13-22 (60 minutes)

1. The simplest approach to the solution is:

Gross margin lost if the store is closed			$(316,800)
Costs that can be avoided:			
Sales salaries	$70,000		
Direct advertising	51,000		
Store rent	85,000		
Delivery salaries	4,000		
Store management salaries ($21,000 – $12,000)	9,000		
Salary of new manager	11,000		
General office compensation	6,000		
Insurance on inventories ($7,500 × 2/3)	5,000		
Utilities	31,000		
Employment taxes	15,000	*	287,000
Decrease in company profits if the North Store is closed			$ (29,800)

*Salaries avoided by closing the store:

Sales salaries	$70,000
Delivery salaries	4,000
Store management salaries	9,000
Salary of new manager	11,000
General office compensation	6,000
Total avoided	100,000
Employment tax rate	× 15%
Employment taxes avoided	$15,000

Problem 13-22 (continued)

Alternative Solution:

	North Store Kept Open	*North Store Closed*	*Difference: Net Operating Income Increase or (Decrease)*	
Sales	$720,000	$ 0	$(720,000)	
Cost of goods sold	403,200	0	403,200	
Gross margin	316,800	0	(316,800)	
Selling and administrative expenses:				
Selling expenses:				
Sales salaries	70,000	0	70,000	
Direct advertising	51,000	0	51,000	
General advertising	10,800	10,800	0	
Store rent	85,000	0	85,000	
Depreciation of store fixtures	4,600	4,600	0	
Delivery salaries	7,000	3,000	4,000	
Depreciation of delivery equipment	3,000	3,000	0	
Total selling expenses	231,400	21,400	210,000	
Administrative expenses:				
Store management salaries	21,000	12,000	9,000	
Salary of new manager	11,000	0	11,000	
General office compensation	12,000	6,000	6,000	
Insurance on fixtures and inventory	7,500	2,500	5,000	
Utilities	31,000	0	31,000	
Employment taxes	18,150	3,150	15,000	*
General office—other	18,000	18,000	0	
Total administrative expenses	118,650	41,650	77,000	
Total operating expenses	350,050	63,050	287,000	
Net operating income (loss)	$(33,250)	$(63,050)	$ (29,800)	

*See the computation on the prior page.

Problem 13-22 (continued)

2. Based on the data in (1), the North Store should not be closed. If the store is closed, then the company's overall net operating income will decrease by $29,800 per quarter. If the store space cannot be subleased or the lease broken without penalty, a decision to close the store would cause an even greater decline in the company's overall net income. If the $85,000 rent cannot be avoided and the North Store is closed, the company's overall net operating income would be reduced by $114,800 per quarter ($29,800 + $85,000).

3. Under these circumstances, the North Store should be closed. The computations are as follows:

Gross margin lost if the North Store is closed (part 1).....	$(316,800)
Gross margin gained from the East Store: $720,000 × 1/4 = $180,000; $180,000 × 45%* = $81,000	81,000
Net operating loss in gross margin.....	(235,800)
Less costs that can be avoided if the North Store is closed (part 1)	287,000
Net advantage of closing the North Store	$ 51,200

*The East Store's gross margin percentage is:
$486,000 ÷ $1,080,000 = 45%