



Exercises

All applicable exercises are available with McGraw-Hill's **Connect® Accounting**.

EXERCISE 4-1 Preparing a Contribution Format Income Statement [LO1]

Whirly Corporation's most recent income statement is shown below:

	Total	Per Unit
Sales (10,000 units)	\$350,000	\$35.00
Variable expenses	<u>200,000</u>	<u>20.00</u>
Contribution margin	150,000	<u>\$15.00</u>
Fixed expenses	<u>135,000</u>	
Net operating income	<u>\$ 15,000</u>	

Required:

Prepare a new contribution format income statement under each of the following conditions (consider each case independently):

1. The sales volume increases by 100 units.
2. The sales volume decreases by 100 units.
3. The sales volume is 9,000 units.

EXERCISE 4-2 Prepare a Cost-Volume-Profit (CVP) Graph [LO2]

Karlik Enterprises distributes a single product whose selling price is \$24 and whose variable expense is \$18 per unit. The company's monthly fixed expense is \$24,000.



Required:

1. Prepare a cost-volume-profit graph for the company up to a sales level of 8,000 units.
2. Estimate the company's break-even point in unit sales using your cost-volume-profit graph.

EXERCISE 4-3 Prepare a Profit Graph [LO2]

Jaffre Enterprises distributes a single product whose selling price is \$16 and whose variable expense is \$11 per unit. The company's fixed expense is \$16,000 per month.



Required:

1. Prepare a profit graph for the company up to a sales level of 4,000 units.
2. Estimate the company's break-even point in unit sales using your profit graph.

EXERCISE 4-4 Computing and Using the CM Ratio [LO3]

Last month when Holiday Creations, Inc., sold 50,000 units, total sales were \$200,000, total variable expenses were \$120,000, and fixed expenses were \$65,000.



Required:

1. What is the company's contribution margin (CM) ratio?
2. Estimate the change in the company's net operating income if it were to increase its total sales by \$1,000.

EXERCISE 4-5 Changes in Variable Costs, Fixed Costs, Selling Price, and Volume [LO4]

Data for Hermann Corporation are shown below:

	Per Unit	Percent of Sales
Selling price	\$90	100%
Variable expenses	<u>63</u>	<u>70</u>
Contribution margin	<u>\$27</u>	<u>30%</u>

Fixed expenses are \$30,000 per month and the company is selling 2,000 units per month.