PRINCIPLES OF FINANCIAL AND MANAGERIAL ACCOUNTING II
Spring 2002
Chapter 23 – Break-Even

"As a student of ORU, I hereby pledge my full and hearty support to the Honor Code. I agree not only to be honest myself but to report all cases of dishonesty that are observed by me."

1-3   Ace Company operated at full capacity during the year ended June 30. The income statement showed present sales of $170,000, variable costs of 60% of sales, and fixed costs and expenses of $60,000. <u>Determine the break-even point (in total dollars)</u>. For full credit, show and label your work in good form.

$$S = FC + VC$$
$$S = \$60,000 + .60S$$
$$.40S = \$60,000$$
$$S = \$150,000$$

4-6   Jack Company operated at full capacity during the year ended July 31. The income statement showed present sales of $500,000, variable costs of 20% of sales, and fixed costs and expenses of $150,000. <u>Determine the margin of safety (in dollars)</u>. For full credit, show and label your work in good form.

Must find BE first: **Then answer the question:**
$$S = FC + VC$$ Actual Sales $500,000
$$S = \$150,000 + .20S$$ Less: S @ BE   187,500
$$.80S = \$150,000$$ MS in dollars $312,500
$$S = \$187,500$$ (Note: lots of people determined MS as 62.5% but that was not the question.)

7-9   King Corporation operated at full capacity during the year ended April 30. The income statement showed present sales of 5,000 units at *$25* each, variable costs per unit of $15, and fixed costs and expenses of $30,000. <u>Determine the break-even point in units</u>. For full credit, show and label your work in good form.

Best formula:
$$S = FC / UCM$$
$$S = \$30,000 / (\$25 - \$15)$$
$$S = \$30,000 / \$10$$
$$S = 3,000 \text{ units}$$

10.   Queen Company operated at full capacity during the year ended May 31. The income statement showed present sales of $500,000, variable costs of 60% of sales, and fixed costs and expenses of $100,000. <u>Determine the contribution margin ratio</u>.

$$1 - 60\% = 40\%$$

(Perhaps the easiest question we have asked this semester! A lot of pencil lead was wasted on this solution!!)