

ACCT& 203 Unit Exam 2 Pretest

Name: _____

- This is a required 25-point assignment; its purpose is to help you prepare for the unit exam.
- **Print this document** and **HANDWRITE** (do not type on a computer) the answers to the following questions, then scan or take a photo of your work, and then **upload your image** in Canvas. **If you do not have access to a printer** you may **handwrite** your answers only on a blank piece of paper, then scan or take a photo of your work, and **then upload your image** in Canvas.
- **You must show your work** on all problems requiring calculations to receive credit.
- Credit for this assignment is based on completion, not accuracy.
- **See the Unit Exam 2 Study Guide: In addition to problems similar to those on this pretest, the exam will contain definition/knowledge based questions on topics specified in the exam study guide. This exam covers chapters 6 and 8.**

Chapter 6

1. A merchandising company has provided the following contribution format income statement:

Sales (10,000 units)	\$ 700,000
Variable expenses	<u>350,000</u>
Contribution margin	350,000
Fixed expenses	<u>85,000</u>
Net operating income	<u>\$ 265,000</u>

What is the *total* contribution margin? (Hint: amount is given) (1 point)

What is the *unit* contribution margin? Show your calculations. (1 point)

(Hint: Total CM/number of units)

2. A company sells a single product at a price of \$20 per unit. Variable expenses are \$12 per unit. The company's contribution format income statement for the most recent month follows:

	Total	Per Unit
Sales (15,000 units)	\$300,000	\$20
Variable expenses	<u>180,000</u>	<u>12</u>
Contribution margin	120,000	\$8
Fixed expenses	<u>100,000</u>	
Net operating income	<u>\$20,000</u>	

If the company sells **16,500 units** next month, what should be the company's total contribution margin? Show your calculations. (2 points)

Suggested approach: Total number of units sold × Unit CM

3. Citrus Company sells a single product, a juicing machine. The selling price is \$180 per unit; variable expenses are \$100 per unit, and total fixed expenses are \$35,000. What is the contribution margin ratio? Show your calculations. (1 point)
4. Data concerning a company's single product appear below.

	Per Unit	% of Sales
Selling price	\$ 200	100%
Variable expenses	\$ 120	60%
Contribution margin	\$ 80	40%

The company is currently selling 1,000 units per month. Fixed expenses are \$50,000 per month. The marketing manager believes that a \$3,000 increase in the monthly advertising budget would result in a 200 unit increase in monthly sales. What should be the overall effect on the company's net operating income if this change is made? Show your calculations. (2 points)

Suggested approach: we do not need to know the total net operating income, just the *change* in the net operating income. Compute the change in CM by additional number of units \times unit contribution margin [given]. Subtract the increase in advertising, a fixed expense. The result is the effect on net operating income.

5. Data concerning a company's only product appear below:

Selling price per unit	\$ 70
Variable expense per unit	\$ 35
Fixed expenses per month	\$ 85,000

How many units must be sold to attain a monthly target profit of \$300,000? Show your calculations. (1 point)

6. A company's margin of safety is \$50,000. If the company's sales drop by \$60,000, will it will have net income or a net loss? (1 point)
7. Data about a company's single product appears below:

Selling price per unit	\$ 150.00
Variable expense per unit	\$ 60.00
Fixed expense per month	\$ 120,000

What is the break-even point in dollar sales? Show your calculations. (1 point)

8. A company sells a single product at a selling price of \$40 per unit. Variable expenses are \$20 per unit and total fixed expenses are \$20,000. What are the unit sales needed to break even? Show your calculations. (1 point)
9. The contribution margin ratio of a company's only product is 40%. The company's monthly fixed expense is \$210,000 and the company's monthly target profit is \$40,000. How many sales dollars are needed to attain that target profit? Show your calculations. (1 point)
10. A company's degree of operating leverage is 1.6. If sales increase by 3%, what would be the expected percentage increase in the company's net operating income? Show your calculations. (1 point)
11. A company that produces and sells a single product has provided the following contribution format income statement:

Sales (5,000 units)	\$100,000
Variable expenses	60,000
Contribution margin	40,000
Fixed expenses	12,000
Net operating income	\$ 28,000

If the company sells 4,900 units next month, what should its new net operating income be? Show your calculations. (2 points)

Suggested approach: Start with current net operating income; then compute the difference in number of units currently sold and the number of units to be sold next month [in this case, $5,000 - 4,900 = 100$ fewer units]; multiply this number by unit CM [have to compute unit CM by taking total CM/# of units]; if fewer units are sold, subtract from current net operating income. If more units are sold, add the amount to the current net operating income.

12. A company sells a product for \$60 per unit. The product's current sales are 20,000 units and its break-even sales are 19,000 units. What is the margin of safety in dollars? Show your calculations. (1 point)

Chapter 8

13. A company's selling and administrative expense budget is based on budgeted unit sales, which are 8,000 units for January. The variable selling and administrative expense is \$1.00 per unit. The budgeted fixed selling and administrative expense is \$100,000 per month, which includes depreciation of \$10,000 per month.

What will be the total **cash disbursements for selling and administrative expenses** in the January selling and administrative expense budget? Show your calculations. (1 point)

What will be the **total selling and administrative expenses** in the January selling and administrative expense budget? Show your calculations. (1 point)

Use this information for questions 14-17:

A new merchandising company plans to collect cash from its sales according to the following schedule:

30% in the month of sale
60% in the month following sale
10% in the second month following sale

The following sales are expected:

Month:	Expected Sales:
January	\$200,000
February	\$250,000
March	\$210,000

14. What are the expected cash collections for January?
Show your calculations. (1 point)
15. What are the expected cash collections for February?
Show your calculations. (1 point)
16. What are the expected cash collections for March?
Show your calculations. (1 point)

17. What is the budgeted Accounts Receivable balance as of March 31?
(This is the remaining amount from January, February, and March sales that will be collected after March 31.) Show your calculations. (2 points)
18. Tyler's Products is preparing its cash budget for June. The budgeted beginning cash balance is \$15,000. Budgeted cash collections (cash receipts) total \$122,000 and budgeted cash disbursements total \$141,000. The required minimum cash balance at the end of the month is \$10,000. How much will the company need to borrow to achieve its required ending cash balance for June? Show your calculations. (1 point)
19. On **June 1, 2022**, Electric Company borrowed \$20,000 at an **annual** interest rate of 6% to meet its financing needs. The company repaid the loan on **July 31, 2022**. What was the **total amount of the loan repayment, including interest**? (Round your final answer to the nearest whole dollar.) Show your calculations. (1 point)