

Candidate: Last name:

First name:

Matriculation Number:

For use of examiner only →	1	2	3	4	5	6	Σ	Grade

The following aids can be used: calculator, English language dictionary

A total of 120 points can be achieved. For each problem 20 points are achievable. You are advised to base your time allocation on these points.

Please write down the solution to each problem coherently. Later additions to a solution apart from the main body of the solution will not be recognized. All of the following 6 problems are to be solved. Check whether you received 3 pages with 6 problems.

Problems:

1. Inventory valuation. Cheaney Inc. reports the following information.

On January 31, 2006, Job #101 was the only job in process with accumulated costs of:

Direct materials	\$2,000
Direct manufacturing labor	1,000
Manufacturing overhead	<u>1,000</u>
Total	<u>\$4,000</u>

During February, Job #102 and Job #103 were started and the following costs were added:

	<u>Job #101</u>	<u>Job #102</u>	<u>Job #103</u>
Direct materials	\$4,000	\$5,000	\$6,000
Direct manufacturing labor	1,000	2,000	3,000
Manufacturing overhead	<u>2,000</u>	<u>3,000</u>	<u>4,000</u>
Total	<u>\$7,000</u>	<u>\$10,000</u>	<u>\$13,000</u>

On February 28, 2006:

Job #101 was completed and sold for \$20,000.

Job #102 was completed but not sold.

Job #103 remains in production.

Required:

Using the above information, determine the following amounts:

- Work-in-process inventory on February 1, 2006.
- Work-in-process inventory on February 28, 2006.
- Finished goods inventory on February 28, 2006.
- Cost of goods manufactured for February.
- Cost of goods sold for February.
- Gross margin for February.

2. CVP-Analysis. Karen Hefner, a florist, operates retail stores in several shopping malls. The average selling price of an arrangement is \$30 and the average cost of each sale is \$18. A new mall is opening where Karen wants to locate a store. The mall operator offers the following three options for its retail store rentals:

1. paying a fixed rent of \$15,000 a month,
2. paying a base rent of \$9,000 plus 10% of revenue received, or
3. paying a base rent of \$4,800 plus 20% of revenue received up to a maximum rent of \$25,000.

Required: a. For each option, compute the breakeven sales and the monthly rent paid at break-even.
b. Show the range of sales levels at which each option is preferable.

3. Costing systems. CP Corporation manufactures two models of coffee dispensers, a standard and a deluxe model. The following activity and cost information has been compiled.

<u>Product</u>	<u>Number of Setups</u>	<u>Number of Components</u>	<u>Number of Direct Labor Hours</u>
Standard	3	30	650
Deluxe	7	50	150
Overhead costs	\$20,000	\$60,000	

Required: Assume a traditional costing system applies the \$80,000 of overhead costs based on direct labor hours.

- a. What is the total amount of overhead costs assigned to the standard model?
- b. What is the total amount of overhead costs assigned to the deluxe model?

Assume an activity-based costing system is used and that number of setups and number of components are identified as the activity-cost drivers for overhead.

- c. What is the total amount of overhead costs assigned to the standard model?
- d. What is the total amount of overhead costs assigned to the deluxe model?

4. Cash Budget. The following information pertains to Amigo Corporation:

<u>Month</u>	<u>Sales</u>	<u>Purchases</u>
July	\$30,000	\$10,000
August	34,000	12,000
September	38,000	14,000
October	42,000	16,000
November	48,000	18,000
December	60,000	20,000

- Cash is collected from customers in the following manner:

Month of sale (2% cash discount)	30%
Month following sale	50%
Two months following sale	15%
Amount uncollectible	5%
- 40% of purchases are paid for in cash in the month of purchase, and the balance is paid the following month.

Required: a. Prepare a summary of cash collections for the 4th quarter.
b. Prepare a summary of cash disbursements for the 4th quarter.

5. Variances. The following data for Drawire company pertain to the production of 450 rolls of telephone wire during June. Selected items are omitted because the costing records were lost in a windstorm.

Direct Materials (All materials purchased were used.)

Standard cost per roll: a pounds at \$4.00 per pound.

Total actual cost: b pounds costing \$9,600.

Standard materials cost allowed for units produced was \$9,000.

Materials price variance: c.

Materials efficiency variance was \$80 unfavorable.

Direct Manufacturing Labor

Standard cost is 3 hours per roll at \$8.00 per hour.

Actual cost per hour was \$8.25.

Total actual cost: d.

Labor price variance: e.

Labor efficiency variance was \$400 unfavorable.

Required: Compute the missing elements in the report represented by the lettered items.

6. Analysing sales variances. The Chair Company manufactures two modular types of chairs, one for the residential market, and the other for the office market. Budgeted and actual operating data for the year 2006 are:

Static Budget	Residential	Office	Total
Number of chairs sold	260,000	140,000	400,000
Contribution margin	\$26,000,000	\$11,200,000	\$37,200,000
Actual Results	Residential	Office	Total
Number of chairs sold	248,400	165,600	414,000
Contribution margin	\$22,356,000	\$13,248,000	\$35,604,000

Prior to the beginning of the year, an office products research firm estimated the industry volume for residential and office chairs of the type sold by the Chair Company to be 2,400,000. Actual industry volume for the year 2006 was only 2,200,000 chairs.

Required:

Compute the following variances in terms of contribution margin.

- Compute the total static-budget variance, the total flexible-budget variance, and the total sales-volume variance.
- Compute the sales-mix variance and the sales-quantity variance by type of chair, and in total.
- Compute the market-share variance and market-size variance.

Best wishes!