

## QUESTIONS - FLEXIBLE BUDGETS

**QUESTION 1.** Flexy Company manufactures monitors.

Following budgeted standards are provided for the month of March 2005:

Average selling price per monitor	\$400 per unit
Total direct material cost per monitor	\$80 per unit
Direct manufacturing labor	
Direct manufacturing labor cost per hour	\$25 per hour
Direct manufacturing labor hour	0.6 hours per unit
Direct marketing cost per unit	\$250 per unit
Fixed overhead	\$80,000 per month
Sales of 1,500 units are budgeted for March.	

Actual March results are as follows:

Unit sales totaled 80% of plans
Actual average selling price declined to \$385
Actual direct manufacturing labor cost is \$ 27 per hour
Actual direct manufacturing labor hour is 700 hours
Actual total direct material cost per unit dropped to \$78
Actual direct marketing costs were \$230 per unit
Fixed overhead costs were \$77,000

- a. Calculate total static budget variance, total sales volume variance and total flexible budget variance.
- b. Calculate price and efficiency variances for direct manufacturing labor

**QUESTION 2.** Prior Company design and manufactures parts for special machinery. The static budget for the year ended December 31, 2002 and the actual results incurred in 2002 are given below:

	Actual Results	Static Budget
Units Sold	80,000	85,000
Revenues	\$ 1,665,000	\$ 1,700,000
Variable costs:		
Direct materials	495,000	510,000
Direct labor	189,000	170,000
Variable MOH	144,000	119,000
Total variable cost	<u>828,000</u>	<u>799,000</u>
Contribution margin	837,000	901,000
Fixed costs	<u>830,000</u>	<u>850,000</u>
Operating Income	\$ 7,000	\$ 51,000

**Required:**

1. Prepare a flexible budget for 2002.
2. Find the flexible budget variances for revenue, variable costs and fixed costs.
3. Find the total sales volume variance.
4. Find the total static budget variance.

**QUESTION 3.** Richmond Table Company manufactures tables for schools. The 2005 operating budget is based on sales of 20,000 units at \$100 per table. Operating income is anticipated to be \$120,000.

Budgeted variable costs are \$64 per unit, while fixed costs total \$600,000.

Actual income for 2005 was a surprising \$354,000 on actual sales of 21,000 units at \$104 each. Actual variable costs were \$60 per unit and fixed costs totaled \$570,000.

Prepare a variance analysis report with both flexible budget variances and sales-volume variances.

**QUESTION 4.** Kapa's Jewelers manufactured 2,000 rings during March with a total overhead budget of \$49,600. The information missing from the variance analysis report is lettered in the following set of data:

Variable overhead:

Standard cost per ring: 0.4 labor hour at \$8 per hour

Actual costs: \$8,400 for 752 hours

Flexible budget: a

Total flexible-budget variance: b

Variable overhead spending variance: c

Variable overhead efficiency variance: d

Fixed overhead:

Budgeted costs: e

Actual costs: f

Flexible-budget variance: \$2,000 favorable

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

**QUESTION 5.** Different management levels in Bags, Inc. require varying degrees of managerial accounting information. Because of the need to comply with the managers' requests, four different variances for manufacturing overhead are computed each month. The information for the September overhead expenditures are as follows:

Budgeted output units	3,200 units
Budgeted fixed manufacturing overhead	\$20,000
Budgeted variable manufacturing overhead	\$5.00 per direct labor hour
Budgeted direct manufacturing labor hours	2 hours per unit
Fixed manufacturing costs incurred	\$26,000
Direct manufacturing labor hours used	7,200
Variable manufacturing costs incurred	\$35,600
Actual units manufactured	3,400

Compute a 4-variance analysis for the plant controller.

- Variable overhead spending variance
- Variable overhead efficiency variance
- Fixed overhead spending variance
- Fixed overhead production volume variance

**QUESTION 6.** Murray Company uses a single cost pool for fixed manufacturing overhead. The amount for July 2005 was budgeted at \$250,000; however, the actual amount was \$350,000. Actual production for July was 25,000 units, and actual machine-hours were 20,000. Budgeted production included 35,500 units and 24,750 machine-hours.

- What is the budgeted fixed overhead rate per output unit (rounded to the nearest cent)?
- What is the budgeted fixed overhead rate per input unit?

**QUESTION 7.** Light Company prepared the following statement of standard costs at the beginning of the year:

Standard Cost per unit:

Direct material input	10 kg. at \$25 per kg.
Direct labor input	5 hours at \$30 per labor hour
Variable overhead	\$ 20 per direct labor hour
Fixed overhead	\$ 37,000 per month.

It was budgeted that 1,000 units would be produced and sold each month.

During July, the following results were reported:

Direct material used	\$ 230,000 (10,000 kg. at \$23 per kg.)
Direct labor cost	\$ 133,920 (4,320 hours at \$31 per hour)
Variable overhead	\$ 88,000
Fixed overhead	\$ 36,500

The actual units produced and sold during July was 900.

There were no beginning inventory of direct materials and finished goods.

- Determine the direct materials price and efficiency variances.
- Determine the direct labor rate and efficiency variances.
- Determine the variable manufacturing overhead spending and efficiency variances.