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Budget Net revenue \$8,000,000 \$7,600,000 Variable Costs Fuel 160,000 \$ 157,000 Repairs and maintenance 80,000 Supplies and miscellaneous 800,000

85,000 5,000 U 788,000 12,000 F Variable payroll 5,360,000 5,200,000 160,000 F Total variable costs* \$6,400,000 \$6,230,000 \$170,000 F Fixed Costs Supervision 180,000 3,000 U \$ 183,000 Rent 160,000 160,000 Depreciation 480,000 480,000 Other fixed costs 160,000 158,000 2,000 F Total fixed costs 980,000 981,000 1,000 U Total fixed and variable costs \$7,380,000 \$7,211,000 \$169,000 F Operating income 620,000 389,000 \$231,000 U

Actual

Variance

\$400,000 U

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Fundamental Assignment Material

8A1 Flexible and Static Budgets

Burton Transportation Company's general manager reports quarterly to the company president on the firm's operating performance. The company uses a budget based on detailed expectations for the forthcoming quarter. The general manager has just received the condensed quarterly performance report shown in Exhibit 8-10.

Although the general manager was upset about not obtaining enough revenue, she was happy that her cost performance was favorable; otherwise, her net operating income would be even worse.

The president was totally unhappy and remarked, "I can see some merit in comparing actual performance with budgeted performance because we can see whether actual revenue coincided with our best guess for budget purposes. But I can't see how this performance report helps me evaluate costcontrol performance."

- 1. Prepare a columnar flexible budget for Burton Transportation at revenue levels of \$7,600,000, \$8,000,000, and \$8,400,000. Use the format of the last three columns of Exhibit 8-2, page 345. Assume that the prices and mix of products sold are equal to the budgeted prices and mix.
- 2. Write out the flexible budget formula for costs as a function of revenue.
- 3. Prepare a condensed table showing the static budget variance, the sales-activity variance, and the flexible-budget variance. Use the format of Exhibit 8-5, page 347.

8-A2 Activity Level Variances

The systems consulting department of Johnson Swimwear designs data collecting, encoding, and reporting systems to fit the needs of other departments within the company. An overall cost driver is the number of requests made to the systems consulting department. The expected variable cost of handling a request was \$500, and the number of requests expected for June 20X1 was 75. Johnson budgeted its monthly fixed costs for the department (salaries, equipment depreciation, space costs) at \$65,000.

The actual number of requests serviced by systems consulting in June 20X1 was 90, and the total costs incurred by the department was \$116,000. Of that amount, \$76,000 was for fixed costs.

Compute the static budget variances and the flexible-budget variances for variable and fixed costs for the systems consulting department for June 20X1.

8-A3 Direct-Material and Direct-Labor Variances

Skold Instruments manufactures trumpets, trombones, tubas, and other brass instruments. The following standards were developed for a line of trumpets.

Exhibit 8-10

Burton Transportation Operating Performance Report Second Quarter, 20X1

U = Unfavorable. F = Favorable.

^{*}For purposes of this analysis, assume that all these costs are totally variable with respect to sales revenue. In practice, many are mixed and have to be subdivided into variable and fixed components before a meaningful analysis can be made. Also, assume that the prices and mix of services sold remain unchanged.

	Standard Inputs Expected for Each Unit of Output Achieved	Standard Price per Unit of Input
Direct materials	5 pounds	\$10 per pound
Direct labor	10 hours	\$25 per hour

During April, Skold scheduled 550 trumpets for production. However, the company produced only 525. Skold purchased and used 2,700 pounds of direct materials at a unit price of \$8.50 per pound. It used 5,700 hours of direct labor at an actual rate of \$26.00 per hour.

- 1. Compute the standard cost per trumpet for direct materials and direct labor.
- 2. Compute the price variances and quantity variances for direct materials and direct labor.
- 3. Based on these sketchy data, what clues for investigation are provided by the variances?

8-B1 Summary Performance Reports

Consider the following data for Tax Preparation Services, a firm much like H&R Block:

- Static budget data: sales, 2,500 clients at \$350 each; variable costs, \$250 per client; fixed costs, \$150,000.
- Actual results at actual prices: sales, 3,100 clients at \$360 per client; variable costs, \$800,000; fixed costs, \$159,500.
 - 1. Prepare a summary performance report similar to Exhibit 8-5, page 347.
 - 2. Fill in the blanks:

Static-budget operating income	\$ —	
Variances		•
Sales-activity variances	\$ —	
Flexible-budget variances	_	
Actual operating income		\$

8-B2 Material and Labor Variances

Consider the following data for a manufacturing company:

	Direct Materials	Direct Labor
Actual price per unit of input (lb and hr)	\$ 7.80	\$12.00
Standard price per unit of input	\$ 7.00	\$12.75
Standard inputs allowed per unit of output	10	2
Actual units of input	115,000	30,000
Actual units of output (product)	14,400	14,400

- Compute the price, quantity, and flexible-budget variances for direct materials and direct labor.
 Use U or F to indicate whether the variances are unfavorable or favorable.
- 2. Prepare a plausible explanation for the performance.

8-B3 Variable-Overhead Variances

You have been asked to prepare an analysis of the overhead costs in the order processing department of a mail-order company like Lillian Vernon Corporation. As an initial step, you prepare a summary of some events that bear on overhead for the most recent period. Variable overhead is applied based on hours of processing-clerk labor. The standard variable-overhead rate per order was \$.06. The rate of 10 orders per hour is regarded as standard productivity per clerk. The total overhead incurred was \$203,600, of which \$135,900 was fixed. The fixed overhead spending variance was \$400 unfavorable. The variable-overhead flexible-budget variance was \$5,600 unfavorable. The variable-overhead spending variance was \$2,500 favorable.

Find the following:

- 1. Variable-overhead efficiency variance
- 2. Actual hours of input
- 3. Standard hours of input allowed for output achieved
- 4. Budgeted fixed overhead.

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8-22 Responsibility of Purchasing Manager

A company's purchasing manager bought 5,000 pounds of material for \$5.50 per pound instead of the budgeted \$6.00 per pound, resulting in a favorable variance of \$2,500. The company has a policy of rewarding employees with 20% of any cost savings they generate. Before awarding a \$500 bonus to the purchasing manager, what other variances would you look at to determine the total effect of the purchasing decision? Explain.

8-23 Variable Overhead Efficiency Variance

Birmingham Company had a \$1,000 U variable-overhead efficiency variance. Neither the plant manager, who was responsible primarily for labor scheduling, nor the administrative manager, who was responsible for most support services, felt responsible for the variance. Who should be held responsible? Why?

Exercises

8-24 Flexible Budget

Stang Sports Equipment Company made 40,000 basketballs in a given year. Its manufacturing costs were \$288,000 variable and \$95,000 fixed. Assume that no price changes will occur in the following year and that no changes in production methods are applicable. Compute the budgeted cost for producing 44,000 basketballs in the following year.

8-25 Basic Flexible Budget

The superintendent of police of the city of Rollag is attempting to predict the costs of operating a fleet of police cars. Among the items of concern are fuel, \$.21 per mile, and depreciation, \$6,000 per car per year.

The manager is preparing a flexible budget for the coming year. Prepare the flexible-budget amounts for fuel and depreciation for each car at a level of 30,000, 40,000, and 50,000 miles.

8-26 Flexible Budget

Scottish Designs has a department that makes high-quality leather cases for iPods. Consider the following data for a recent month.

	Budget Formula per Unit	Various Levels of Output		
Units		6,000	7,000	8,000
Sales	\$17	\$?	\$?	\$?
Variable costs			(20) N	•
Direct materials	?	39,000	?	?
Hand labor	4	?	?	?
Fixed costs				
Depreciation		?	19,000	?
Salaries		?	?	34,000

Fill in the unknowns.

8-27 Basic Flexible Budget

The budgeted prices for materials and direct labor per unit of finished product are \$11 and \$5, respectively. The production manager is delighted about the following data.

	Static Budget	Actual Costs	Variance
Direct materials	\$77,000	\$72,000	\$5,000 F
Direct labor	35,000	32,600	2,400 F

Is the manager's happiness justified? Prepare a report that might provide a more detailed explanation of why the static budget was not achieved. Good output was 5,800 units.

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