

STATIC BUDGETS, FLEXIBLE BUDGETS

Key Topics to Know

- Difference between a flexible budget and a static budget
- Flexible budget “flexes” due to changes in activity.
- Prepare a flexible budget that includes revenue and both variable and fixed costs
- Comparing actual activity to a static/planning or flexible budget and why the flexible budget is better for comparison.
- Activity variances are the differences between the static/planning budget and the flexible budget and are caused by the difference between planned and actual activity levels.
- Variable costs will be different in the static/planning budget and the flexible budget because both are affected in total by the level of activity.
- Fixed costs will be the same in the static/planning budget and the flexible budget because fixed costs are unaffected in total by changes in the activity level. Therefore activity variances for fixed costs are always zero.

Problems

Problem #1

V Company prepared the following budget for the year based on 1,000 units sold:

Variable costs	<u>450,000</u>
Contribution margin	300,000
Fixed costs	<u>200,000</u>
Operating income	100,000

Actual results for the year were:

Units sold	950
Sales	\$703,000
Variable costs	<u>432,250</u>
Contribution margin	270,750
Fixed costs	<u>185,000</u>
Operating income	85,750

- Required:
- a) Prepare a static and flexible budget for the year.
 - b) Prepare a budget for next year with 1,100 units sold and a 10% increase in fixed costs.

Problem #2

B Company uses patient-visits as its measure of activity. During July, the clinic budgeted for 2,700 patient-visits, but its actual level of activity was 3,200 patient-visits. The clinic uses the following revenue and cost formulas in its budgeting, where q is the number of patient-visits:

Personnel expenses	$\$31,200 + \$15.10q$
Medical expenses	$\$700 + \$9.60q$
Occupancy expenses	$\$10,000 + \$2.00q$
Administrative expenses	$\$7,000 + \$0.20q$

The clinic reported the following actual results for July:

Personnel expenses	76,190
Medical expenses	31,790
Occupancy expenses	15,960
Administrative expenses	7,600

Required: Prepare the clinic's static and flexible budgets for July.

Problem #3

T Company is a for-profit vocational school. The school bases its budgets on two measures of activity (i.e., cost drivers), namely student and course. The school uses the following data in its budgeting:

	<u>Fixed cost per month</u>	<u>Variable cost per student</u>	<u>Variable cost per course</u>
Revenue	\$0	\$336	\$0
Faculty wages	0	0	2,000
Course supplies	0	52	30
Administrative expenses	47,700	13	29

In April, the company budgeted for 1,870 students and 174 courses. The company's actual results for the month appear below:

Actual students	1,670
Actual courses	172
Faculty wages	350,110
Course supplies	93,040
Administrative expenses	<u>75,728</u>

Required: Prepare the company's static and flexible budgets for July.

Multiple Choice Questions

1. P Company is a bed and breakfast establishment in a converted 100-year-old mansion. Guests appreciate its gourmet breakfasts and individually decorated rooms. The overhead budget for the most recent month appears below:

Activity level	86 guests
Variable overhead costs:	
Supplies	\$86.00
Laundry	507.40
Fixed overhead costs:	
Utilities	340.00
Salaries and wages	4,790.00
Depreciation	<u>2,620.00</u>
Total overhead cost	<u>\$8,343.40</u>

Variable overhead costs are driven by the number of guests. What would be the total budgeted overhead cost for a month if the activity level is 76 guests?

- a) \$52,848.40
 b) \$8,343.40
 c) \$8,274.40
 d) \$7,373.24
2. R Company's cost formula for its vehicle operating cost is \$2,170 per month plus \$408 per snow-day. For the month of December, the company planned for activity of 16 snow-days, but the actual level of activity was 13 snow-days. The actual vehicle operating cost for the month was \$7,600. The vehicle operating cost in the static budget for December would be:
- a) \$7,474
 b) \$9,354
 c) \$8,698
 d) \$7,600

3. N Company manufactures and sells a single product. The company uses units as the measure of activity in its budgets and performance reports. During February, the company budgeted for 5,700 units, but its actual level of activity was 5,690 units. The company has provided the following data concerning the formulas used in its budgeting and its actual results for February:

<u>Budgeted data</u>	<u>Fixed element per month</u>	<u>Variable element per unit</u>
Direct labor	\$0	\$3.70
Direct materials	0	17.80
Manufacturing overhead	30,500	1.20
Selling and administrative expenses	<u>26,800</u>	<u>0.30</u>
Total expenses	<u>\$57,300</u>	<u>\$23.00</u>

Actual results

Direct labor	\$21,093
Direct materials	\$104,952
Manufacturing overhead	\$37,888
Selling and administrative expenses	\$29,787

The selling and administrative expenses in the budget for February would be:

- a) \$29,787
- b) \$28,507
- c) \$29,839
- d) \$28,510

4. D Company manufactures and sells a single product. The company uses units as the measure of activity in its budgets and performance reports. During October, the company budgeted for 5,100 units, but its actual level of activity was 5,090 units. The company has provided the following data concerning the formulas to be used in its budgeting:

	<u>Fixed element</u> <u>per month</u>	<u>Variable element</u> <u>per unit</u>
Revenue		\$39.20
Direct labor	\$0	\$5.40
Direct materials	0	13.20
Manufacturing overhead	45,800	1.70
Selling and administrative expenses	<u>22,800</u>	<u>0.50</u>
Total expenses	<u>\$68,600</u>	<u>\$20.80</u>

The direct materials in the flexible budget for October would be:

- a) \$67,320
- b) \$64,905
- c) \$64,651
- d) \$67,188

Solutions to Problems

Problem #1

	<u>Actual</u>	<u>Flexible Budget</u>	<u>Static Budget</u>
	950	950	1,000
Variable costs	<u>432,250</u>	<u>427,500</u>	<u>450,000</u>
Contribution margin	270,750	285,000	300,000
Fixed costs	<u>185,000</u>	<u>200,000</u>	<u>200,000</u>
Operating income	85,750	85,000	100,000

	<u>Variable</u>	<u>Cost Formula</u> <u>Fixed</u>	<u>Static Budget</u>
			1,100
Variable costs	<u>450</u>		495,000
Contribution margin	300		330,000
Fixed costs		\$220,000	220,000

Problem #2

		<u>Flexible Budget</u>	<u>Planning Budget</u>
Patient visits		3,200	2,700
Expenses:			
Personnel expenses	\$31,200 + \$15.10q	79,520	71,970
Medical expenses	\$700 + \$9.60q	31,420	26,620
Occupancy expenses	\$10,000 + \$2.00q	16,400	15,400
Administrative expenses	\$7,000 + \$0.20q	<u>7,640</u>	<u>7,540</u>
Total expenses		134,980	121,530

Problem #3

		<u>Flexible Budget</u>	<u>Planning Budget</u>
Students q1		1,670	1,870
Courses q2		172	174
Expenses:			
Personnel expenses	\$2,000q1	344,000	348,000
Medical expenses	\$52q1 + \$30q2	92,000	102,460
Administrative exp.	\$47,700+ \$13q1+\$29q2	<u>74,398</u>	<u>77,056</u>
Total expenses		510,398	527,516

Solutions to Multiple Choice Questions

- 1. C
- 2. C
- 3. D
- 4. D