

Exercise 1

Spreadsheet Budgeting

You are to use a spreadsheet to compute detailed budgets for your Production Department. I've provided an EXCEL spreadsheet on the website which can be downloaded from your browser by right click /save target As. If you prefer, You can make your own spreadsheet. Last year's actual expenses are shown in column B. Amounts are in thousands, rounded to hundreds. 472 Units were produced last year. Expenses are categorized as either fixed or variable with a factor of 1.0 in column D if a cost is completely independent of production rate.

- 5 1. Change my name to yours and Attach a printout showing projected expenses for 700 units production. This is 5 points jfsynr.
- 10 2. Suppose revenues of \$30 per unit were left to cover your budgeted costs after deducting selling costs, etc.. Manipulate volume in cell G5 (circled) to find the break-even point. At what volume is unit cost \$30 ?
- 10 3. Suppose 20% of your operators were needed just to maintain the buildings, so that 20% of operator's salaries should be considered as fixed cost. Attach a printout of the new projected budget for 700 units.

Total = 2.5% of course grade.

A B C D E F G H I J

01-Feb-95 This Year Expense Class	Annual'd Actuals	Fixed Factor	Unit Cost	Next Year Fixed Cost	Variable Cost	Total Budget	Unit Cost	%
Volume	472		+B5			472	+G5	
Spvrs Pay	453	1	+B7/E55	+B7*D7	+E7*(1-D7)*G55	+G7+F7	+H7/I55	+I7/J519
Operat.Pay	1768	1	+B8/E55	+B8*D8	+E8*(1-D8)*G55	+G8+F8	+H8/I55	+I8/J519
Materials	1347.2	1	+B9/E55	+B9*D9	+E9*(1-D9)*G55	+G9+F9	+H9/I55	+I9/J519
Ofc.Supplies	3.7	1	+B10/E55	+B10*D10	+E10*(1-D10)*G55	+G10+F10	+H10/I55	+I10/J519
Supplies	1923.5	1	+B11/E55	+B11*D11	+E11*(1-D11)*G55	+G11+F11	+H11/I55	+I11/J519
Heat	451.4	1	+B12/E55	+B12*D12	+E12*(1-D12)*G55	+G12+F12	+H12/I55	+I12/J519
Telephone	14.4	1	+B13/E55	+B13*D13	+E13*(1-D13)*G55	+G13+F13	+H13/I55	+I13/J519
Electric	257.6	1	+B14/E55	+B14*D14	+E14*(1-D14)*G55	+G14+F14	+H14/I55	+I14/J519
Rep.&Maint.	113.6	1	+B15/E55	+B15*D15	+E15*(1-D15)*G55	+G15+F15	+H15/I55	+I15/J519
Reworks	567.2	1	+B16/E55	+B16*D16	+E16*(1-D16)*G55	+G16+F16	+H16/I55	+I16/J519
Adm.Alloc'n	5000	1	+B17/E55	+B17*D17	+E17*(1-D17)*G55	+G17+F17	+H17/I55	+I17/J519
TOTALS	@SUM(B18..B6)		@SUM(E17..E7)	@SUM(F17..F7)	@SUM(G17..G7)	@SUM(H17..H7)	@SUM(I17..I7)	@SUM(J17..J7)
Bud Basis				Category		Budget		
				Payroll		+H7+H8		
				Mat. & Supplies		+H9+H11		
				Reworks		+H16		
				Other Op. Cost		+H29-H23-H24-H25-H27		
				Allocations		+H17		
				TOTAL		+H19 @SUM(H28..H22)		