

3.

Award: 10.00 points

Jay Corporation has provided data from a two-year period to aid in planning. The Controller has asked you to prepare a contribution format income statement. Use the information included in the Excel Simulation and the Excel functions described below to complete the task.

- **Cell Reference:** Allows you to refer to data from another cell in the worksheet. From the Excel Simulation below, if in a blank cell, “=B4” was entered, the formula would output the result from cell B4, or 17,000 in this example.
- **Basic Math functions:** Allows you to use the basic math symbols to perform mathematical functions. You can use the following keys: + (plus sign to add), - (minus sign to subtract), * (asterisk sign to multiply), and / (forward slash to divide). From the Excel Simulation below, if in a blank cell “=B19+B20” was entered, the formula would add the values from those cells and output the result, or 183,800 in this example. If using the other math symbols the result would output an appropriate answer for its function.
- **SUM function:** Allows you to refer to multiple cells and adds all the values. You can add individual cell references or ranges to utilize this function. From the Excel Simulation below, if in a blank cell “=SUM(C18,C19,C20)” was entered, the formula would output the result of adding those three separate cells, or 47,300 in this example. Similarly, if in a blank cell “=SUM(C18:C20)” was entered, the formula would output the same result of adding those cells, except they are expressed as a range in the formula, and the result would be 47,300 in this example.

High-Low Method; Contribution Format Income Statement - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW Sign In

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Paste Alignment Number Conditional Formatting Format as Table Cell Styles Cells Editing

Clipboard Font Styles

A1 To aid in planning, Jay Corporation is preparing a contribution format income

	A	B	C	D	E	F
1	To aid in planning, Jay Corporation is preparing a contribution format income statement.					
2						
3	Budgeted information for Quarter 1 of Year 3:					
4	Sales in units	17,000				
5	Sales price per unit	\$ 48.00				
6						
7	After analyzing expenses, the company has determined the following cost patterns.					
8	Cost of goods sold	\$ 29.00	per unit			
9	Sales commissions	9.50%	per dollar of sales			
10						
11	Administrative salaries	\$ 45,000.00	per quarter			
12	Rent expense	\$ 27,000.00	per quarter			
13	Depreciation expense	\$ 36,000.00	per quarter			
14						
15	Management has concluded that shipping expense is a mixed cost. Units shipped and the related shipping cost over the last eight quarters are:					
16						
17	Year 1	<u>Total Shipping Cost</u>	<u>Units</u>			
18	Quarter 1	\$ 67,000.00	12,500			
19	Quarter 2	\$ 94,000.00	21,000			
20	Quarter 3	\$ 89,800.00	13,800			
21	Quarter 4	\$ 92,600.00	20,000			
22	Year 2					
23	Quarter 1	\$ 72,500.00	13,700			

Sheet1

READY 100%

Attempt(s) Hint Show Me

References

Excel Simulation Difficulty: 2 Medium

Chapter: Chapter 05 Learning Objective: 05-10 (Appendix 5A) Analyze a mixed cost using a scattergraph plot and the high-low method.

High-Low Method; Contribution Format Income Statement - Excel

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A1 To aid in planning, Jay Corporation is preparing a contribution format income

	A	B	C	D	E	F
22	Year 2					
23	Quarter 1	\$	72,500.00		13,700	
24	Quarter 2	\$	80,000.00		14,000	
25	Quarter 3	\$	84,000.00		14,300	
26	Quarter 4	\$	100,000.00		22,500	
27						
28	Use the data to answer the following.					
29						
30	1. Using the high-low method, determine a cost formula for shipping expenses.					
31						
32		Total Shipping Cost		Units		
33	High level of activity					
34	Low level of activity					
35	Change in activity					
36						
37	Variable cost			per unit		
38						
39	Compute the fixed cost portion using the high level of activity.					
40	Total cost at high level of activity					
41	Less: Variable cost element					
42	Total fixed cost					
43						
44	2. Prepare a contribution format income statement for Quarter 1 of Year 3.					
45						

Sheet1

READY 100%

Attempt(s) Hint Show Me

References

Excel Simulation Difficulty: 2 Medium

Chapter: Chapter 05 Learning Objective: 05-10 (Appendix 5A) Analyze a mixed cost using a scattergraph plot and the high-low method.

High-Low Method; Contribution Format Income Statement - Excel

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Paste Alignment Number Conditional Format as Cell Cells Editing
 Formatting Table Styles

Clipboard Font Styles

A1 To aid in planning, Jay Corporation is preparing a contribution format income

	A	B	C	D	E	F
46	Jay Corporation					
47	Budgeted Contribution Format Income Statement					
48	For Year 3, Quarter 1					
49						
50	Sales					
51	Variable expenses:					
52	Cost of goods sold					
53	Sales commissions					
54	Shipping expense					
55	Total variable expenses					
56	Contribution margin					
57	Fixed expenses:					
58	Administrative salaries					
59	Rent expense					
60	Shipping expense					
61	Depreciation expense					
62	Total fixed expenses					
63	Net operating income					
64						
65						
66						
67						

Sheet1

READY 100%

Attempt(s) Hint Show Me

References

Excel Simulation Difficulty: 2 Medium

Chapter: Chapter 05 Learning Objective: 05-10
 (Appendix 5A) Analyze a mixed cost using a scattergraph plot and the high-low method.

6. Award: 10.00 points

Millard Corporation is a wholesale distributor of office products. It purchases office products from manufacturers and distributes them in the West, Central, and East regions. Each of these regions is about the same size and each has its own manager and sales staff.

The company has been experiencing losses for many months. In an effort to improve performance, management has requested that the monthly income statement be segmented by sales region. The company's first effort at preparing a segmented income statement for May is given below.

	Sales Region		
	West	Central	East
Sales	\$ 312,000	\$ 805,000	\$ 698,000
Regional expenses (traceable):			
Cost of goods sold	92,000	239,000	311,000
Advertising	108,000	245,000	241,000
Salaries	55,000	56,000	111,000
Utilities	9,500	15,800	14,300
Depreciation	22,000	34,000	25,000
Shipping expense	17,000	27,000	36,000
Total regional expenses	303,500	618,800	738,300
Regional income (loss) before corporate expenses	8,500	186,200	(40,300)
Corporate expenses:			
Advertising (general)	14,000	42,000	33,000
General administrative expense	19,000	19,000	19,000
Total corporate expenses	33,000	61,000	52,000
Net operating income (loss)	\$ (24,500)	\$ 127,200	\$ (92,300)

The cost of goods sold and shipping expense are both variable. All other costs are fixed.

Required:

3. Prepare a new contribution format segmented income statement for May. (Round percentage answers to 1 decimal place.)

	Total Company		West		Central		East	
	Amount	%	Amount	%	Amount	%	Amount	%
Variable expenses:								
Total variable expenses								
Traceable fixed expenses:								
Total traceable fixed expenses								
Common fixed expenses:								
Total common fixed expense								
Net operating income (loss)								

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References

Worksheet

Difficulty: 2 Medium

Learning Objective: 06-04 Prepare a segmented income statement that differentiates traceable fixed costs from common fixed costs and use it to make decisions.