

# [Variable and fixed costs](https://assignbuster.com/variable-and-fixed-costs/)

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Contribution Margin Income ment Following is the contribution income ment of Herrested Company for the year ending December 31, In this income statement, all the variable costs are first deducted from total sales to get a contribution margin figure. After that, all the fixed expenses are then deducted from contribution margin figure to reach at the net income figure. In year 2011, Herrested Company earned contribution margin of $60 per unit or $480, 000 in total with the net income of $180, 000.   
Herrested Company   
Contribution Margin Income Statement   
For the period ending December 31, 2011   
  
  
  
  
  
per unit   
No. of units sold   
Total   
Sales   
250   
8, 000   
2, 000, 000   
Variable Cost   
  
Direct Material   
100   
  
Direct Labor   
50   
  
Variable Overhead   
30   
  
Variable – Selling & Admin   
10   
  
Total Variable Cost   
190   
8, 000   
1, 520, 000   
Contribution   
60   
8, 000   
480, 000   
Fixed – Overhead   
200, 000   
Fixed – Selling & Admin   
100, 000   
Net Income   
180, 000   
  
  
  
  
If the selling price per unit is increased to $280, it will result in the increase of contribution margin per unit such that it would increase from $60 to $90 per unit or $720, 000 in total. Similarly, the net income will also increase from $180, 000 to $420, 000.   
Herrested Company   
Contribution Margin Income Statement   
For the period ending December 31, 2011   
  
  
  
  
  
per unit   
No. of units sold   
Total   
Sales   
280   
8, 000   
2, 240, 000   
Variable Cost   
  
Direct Material   
100   
  
Direct Labor   
50   
  
Variable Overhead   
30   
  
Variable – Selling & Admin   
10   
  
Total Variable Cost   
190   
8, 000   
1, 520, 000   
Contribution   
90   
8, 000   
720, 000   
Fixed – Overhead   
200, 000   
Fixed – Selling & Admin   
100, 000   
Net Income   
420, 000   
  
  
  
  
The formula to calculate the break even number of units is fixed cost divided by contribution margin per unit (Garrison et al, 2009). At a selling price of $250 per unit and direct material cost per unit of $100, the breakeven number of units, are 5, 000. If Herrested Company wants to remain at no profit/no loss position, it would at least need to produce 5, 000 units which would be exactly enough to cover the associated fixed costs.   
If direct material cost is increased to $120 per unit, it will reduce the contribution margin per unit from $60 per unit to $40 per unit. As a result, the new breakeven quantity would be 7, 500 units. Following are the computations of breakeven units at both the contribution margin per unit of $60 and $40 respectively:   
Breakeven units   
=   
Fixed Cost / Contribution Margin per unit   
=   
300, 000   
=   
5, 000   
  
60   
  
  
  
Breakeven units   
=   
Fixed Cost / Contribution Margin per unit   
=   
300, 000   
=   
7, 500   
  
  
  
  
40   
  
  
References   
Garrison, Ray H., Noreen, Eric W. & Brewer Peter C. (2009). Managerial Accounting. 13th ed. United States: McGraw-Hill/Irwin.