

Variable and fixed costs

[Science](#), [Mathematics](#)



Contribution Margin Income Statement Following is the contribution income statement 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

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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.