

Break-Even Menu

This menu implements a quick way to perform break-even analysis. To show it, touch “**OPT**” key and in the “**5) Business:**” section, touch the “**Break-Even**” button.

Break-Even Analysis

<div style="background-color: #0070c0; color: white; border-radius: 10px; padding: 5px; margin-bottom: 5px;">Price</div> <div style="text-align: center; font-size: small;">+300.00</div>	<div style="background-color: #0070c0; color: white; border-radius: 10px; padding: 5px; margin-bottom: 5px;">#Units</div> <div style="text-align: center; font-size: small;">+3,200.00</div>
<div style="background-color: #0070c0; color: white; border-radius: 10px; padding: 5px; margin-bottom: 5px;">Var. Cost</div> <div style="text-align: center; font-size: small;">+250.00</div>	<div style="background-color: #0070c0; color: white; border-radius: 10px; padding: 5px; margin-bottom: 5px;">Fix Cost</div> <div style="text-align: center; font-size: small;">+150,000.00</div>
<div style="background-color: #0070c0; color: white; border-radius: 10px; padding: 5px; margin-bottom: 5px;">Profit</div> <div style="text-align: center; font-size: small;">+10,000.00</div>	<div style="background-color: #800000; color: white; border-radius: 10px; padding: 5px; margin-bottom: 5px;">Unit Cost</div>
<div style="background-color: #800000; color: white; border-radius: 10px; padding: 5px; margin-bottom: 5px;">Total Sales</div>	<div style="background-color: #800000; color: white; border-radius: 10px; padding: 5px; margin-bottom: 5px;">Total Cost</div>

The calculation solves, for any of the variables, using the following formulas:

$$\text{Profit} = (\text{Price} - \text{Var.Cost}) \cdot \text{\#Units} - \text{Fix Cost}$$

$$\text{Cost} = \text{Var.Cost} + (\text{Fix Cost} / \text{\#Units})$$

Button	Performed Actions
[Price]	Stores or calculates the Price value : Price = (Profit + Fix.Cost) ÷ #Units + Var.Cost
[Var.Cost]	Stores or calculates the Variable Cost value : Var.Cost = Price - (Profit + Fix.Cost) / #Units
[Fix.Cost]	Stores or calculates the Fix Cost value : Fix.Cost = (Price - Var.Cost) · #Units - Profit
[#Units]	Stores or calculates the Number of Units value : #Units = (Profit + Fix.Cost) / (Price - Var.Cost)

Button	Performed Actions
[Profit]	Stores or calculates the Profit value : Profit = (Price - Var.Cost) • #Units - Fix.Cost
[Total Sales]	Calculates the Total Sales Value: Total Sales = Price • #Units
[Total Cost]	Calculates the Total Cost value: Total Cost = Var.Cost • #Units + Fix Cost
[Unit Cost]	Calculates the Total Cost per unit value: Unit Cost = Total Cost / #Units

Example 1:

The sale price of an item is \$300.00, the cost of production per unit is \$250.00, and the monthly fixed cost of the business is \$150,000.00. How many units would have to be sold for break-even? and for profit of 10,000.00?.

Keystrokes	Description
300 [Price]	Stores the sale price of the item.
250 [Var.Cost]	Stores the variable cost of the item.
150000 [Fix.Cost]	Stores the fixed cost of the business.
0 [Profit]	Stores the “0” profit (break-even).
[#Units]	Calculates the number of units to be sold for break-even. #Units = \$3,000 items
10000 [Profit]	Stores the the target profit.
[#Units]	Calculates the number of units to be sold for target profit. #Units = \$3,200 items

What is the total cost per unit for break-even and for a profit of \$10,000.00?

Keystrokes	Description
0 [Profit] [#Units]	Stores the "0" profit (break-even). Calculates #Units
[Unit Cost]	Calculates the total cost per item. Cost = \$300.00 per item.
10000 [Profit] [#Units]	Stores the "10,000" profit . Calculates #Units
[Unit Cost]	Calculates the total cost per item. Cost = \$296.88 per item.