## Break-Even Worksheet

| Price <br> 300.00 | Var. Cost <br> 250.00 | Quantity <br> $3,200.00$ |
| :---: | :---: | :---: |
| Fix Cost |  | Profit <br> $150,000.00$ |
| 10,000.00 |  |  |
| Total Sales | Total Cost | Cost / Unit |

This worksheet implements a quick way to perform break-even analysis based on the following equation:
Profit = (Price - Var.Cost) • Units - Fix.Cost

|  | Break-Even Menu Actions |
| :---: | :---: |
| [Price] | Stores or calculates the Price value : <br> Price $=($ Profit + Fix.Cost $) \div$ 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 : <br> Fix.Cost = (Price - Var.Cost) • Units - Profit |
| [Units] | Stores or calculates the Number of Units value : Units $=($ Profit + Fix.Cost $) /($ Price - Var.Cost $)$ |
| [Profit] | Stores or calculates the Profit value : <br> Profit $=($ Price $\boldsymbol{-}$ Var.Cost) $\cdot$ Units $\boldsymbol{-}$ Fix.Cost |
| [Total Sales] | Calculates the Total Sales Value: Total Sales = Price $\cdot$ Units |
| [Total Cost] | Calculates the Total Cost value: <br> Total Cost = Var.Cost • Units + Fix Cost |
| [Total Cost per Unit] | Calculates the Total Cost per unit value: Unit Cost = Total Cost / Units |
| If any other key is pressed before one of the Blue keys, the displayed number is stored in the corresponding variable. Otherwise, the variable is calculated. |  |

## Example :

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. <br> Units = 3,000 items |
| 10000 [ Profit ] | Stores the the target profit. |
| [ Units ] | Calculates the number of units to be sold. <br> 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) and calculates Units |
| [ Cost / Unit ] | Calculates the total cost per item. <br> Cost $=\mathbf{3 0 0 . 0 0}$ per item. |
| 10000 [ Profit ] <br> [ Units ] | Stores the "10,000" profit and calculates <br> Units $=\mathbf{3 , 2 0 0 . 0 0}$ |
| [ Cost / Unit ] | Calculates the total cost per item. <br> Cost $=\mathbf{2 9 6 . 8 8}$ per item.. |

