Break-even point

The break-even point can be calculated in units as well as rand value. The breakeven point was when the total receipts are equal to total costs.

Break-even point in units

Break-even point in units involves the smallest number of products to be sold during a specific period in order to ensure that the business does not suffer a loss and is able to cover all costs (fixed and variable costs). In other words, the number of units to be manufactured in order to break-even = neither making a profit nor suffering a loss.

• Break-even in units = $\frac{\text{Total fixed costs}}{\text{Marginal income per unit}}$

Marginal income (contribution) per unit = Sales price per unit – variable costs per unit

- Fixed cost = Manufacturing overheads + Administration costs
- Selling price per unit = $\frac{\text{Sales}}{\text{Total units sold}}$
- Variable costs = Direct material costs + Direct labour costs + Selling costs
- Variable cost per unit = <u>Variable costs</u> Total units manufactured
- Break-even in rand value
- Break-even in rand value = break-even point in units × selling price per unit

Calculations

Direct material cost per unit = $\frac{\text{Direct material cost}}{\text{Total units produced}}$	Direct labour cost per unit = Direct labour cost Total units produced
Manufacturing overheads per unit = $\frac{\text{Direct material cost}}{\text{Total units produced}}$	$Selling and distribution cost per unit= \frac{Selling and distribution costs}{Total units sold}$
Administrative cost per unit = Administrative costs Total units sold	Unit cost = Total manufacturing costs Total units manufactured
Variable cost per unit = Direct material cost per unit + Direct labour cost per unit + selling and distribution cost per unit	Fixed cost per unit = Manufacturing overheads per unit + administrative cost per unit
Contribution per unit = Selling price per unit – Variable cost per unit	Break-even point = Fixed vosts Contribution per unit