

FORMULAE AND KEY DATA

Number	Formula
1	Total costs = Fixed costs + Variable costs
2	Profit = Total revenue - Total costs OR Total contribution - Fixed costs
3	Total variable costs = Variable cost per unit × Number of units sold
4	Sales revenue or Turnover = Selling price per unit × Number of units sold
5	Market capitalisation of a business = Number of issued shares × Current share price
6	Expected value of a decision with two possible outcomes - A & B = (Pay-off of A × probability of A) + (Pay-off of B × probability of B) N.B. Probability of A + Probability of B = 1.0
7	In a decision tree Net gain = Expected value - Initial cost of decision
8	Market size volume is the quantity of goods and services produced in a particular market over a period of time usually one year .
9	Market size (value) is the total sales revenue generated from selling all of the goods and services produced in a particular market over a period of time (usually one year).
10	Sales volume is the quantity of goods and services produced by a particular business over a period of time (usually one year).
11	Sales value is the total sales revenue of a particular business over a period of time usually (one year).
12	Market growth (%) in year 'X' = $\frac{\text{Change in the size of the market between year (X-1) and year X}}{\text{Size of the market in year (X-1)}} \times 100$
13	Sales growth % in year 'X' = $\frac{\text{Change in sales of product or business between year (X-1) and year X}}{\text{Sales of product or business in year (X-1)}} \times 100$
14	Market share % = $\frac{\text{Sales of one product OR brand OR business}}{\text{Total sales in the market}} \times 100$
15	Price elasticity of demand = $\frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}} \times 100$ Price inelastic demand has a coefficient in the range 0 to -1. Price elastic demand has a coefficient in the range -1 to $-\infty$
16	Added value (value added) = Sales revenue - costs of bought-in goods and services

17 Labour productivity = $\frac{\text{Output per time period}}{\text{Number of employees}}$

18 Unit costs (average costs) = $\frac{\text{Total costs of production}}{\text{Number of units of output produced}}$

19 Capacity utilisation (%) = $\frac{\text{Actual output in a given time period}}{\text{Maximum possible output in a given time period}} \times 100$

20 Return on investment (%) = $\frac{\text{Return on investment (£)}}{\text{Cost of the investment (£)}} \times 100$

21 Gross Profit = Sales Revenue - Cost of Sales

22 Profit from Operations = Operating profit =
Sales Revenue - Cost of Sales - Operating Expenses

23 Profit for year = Operating profit + Profit from other activities - Net finance costs
-Tax

24 Variance = The difference between an actual and a budgeted figure.
Favourable variance results in profits being higher than forecast.
Adverse variance results in profits being lower than forecast.

25 Contribution per unit = Selling price - Variable costs per unit

26 Total contribution = Contribution per unit \times Units produced or sold OR
Total contribution = Total revenue - Total variable costs

27 Break-even output = $\frac{\text{Fixed costs}}{\text{Contribution per unit}}$

28 On a break-even chart the break-even output is the level of output at which
Total Revenue equals Total Costs.

29 On a break-even chart the level of profit at a given level of output is the vertical
distance between the Total Revenue line and the Total Cost line.

30 Margin of safety = Actual level of output - Breakeven level of output

31 Gross profit margin (%) = $\frac{\text{Gross profit}}{\text{Sales revenue}} \times 100$

32 Profit from operations margin = Operating profit margin (%) = $\frac{\text{Operating profit}}{\text{Sales revenue}} \times 100$

33 Profit for year margin (%) = $\frac{\text{Profit for year}}{\text{Sales revenue}} \times 100$

34 Labour turnover (%) = $\frac{\text{Number of staff leaving during the year}}{\text{Average number of staff employed by the business during the year}} \times 100$

35 Employee retention rate (%) for a particular time period =
 $\frac{\text{Number of staff leaving during the year}}{\text{Average number of staff employed by the business during the year}} \times 100$

36 Employee costs as percentage of turnover = $\frac{\text{Employee costs}}{\text{Sales turnover}} \times 100$

37 Labour cost per unit = $\frac{\text{Labour costs}}{\text{Units of output}}$

38 Return on capital employed (ROCE) (%) = $\frac{\text{Operating profit}}{\text{Total equity + non-current liabilities}} \times 100$

Where total equity + non-current liabilities = capital employed

39 Current ratio = $\frac{\text{Current assets}}{\text{Current liabilities}}$

40 Gearing % = $\frac{\text{Non-current liabilities}}{\text{Total equity + non-current liabilities}} \times 100$

Where total equity plus non-current liabilities = capital employed

41 Payables days = $\frac{\text{Payables}}{\text{Cost of sales}} \times 365$

Where payables = creditors

42 Receivables days = $\frac{\text{Receivables}}{\text{Sales revenue}} \times 365$

Where receivables = debtors

43 Inventory turnover = $\frac{\text{Cost of goods sold}}{\text{Average inventories held}}$

44 Average rate of return % = $\frac{\text{Net return from project (£) or number of years}}{\text{Initial cost of project (£)}} \times 100$

