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Business formulae

- Average rate of returns

$$\text{average rate of return (\%)} = \frac{\text{average annual profit (total profit/no.of years)}}{\text{cost of investment}} \times 100$$

- Total costs

$$\text{total costs (TC)} = \text{total fixed costs (TFC)} + \text{total variable costs (TVC)}$$

- Variable costs

$$\text{variable costs} = \text{costs of one unit} \times \text{quantity produced}$$

- Percentage growth

$$\text{percentage growth} = \frac{\text{increase in Sales}}{\text{original sales}} \times 100$$

- Revenue

$$\text{Revenue} = \text{Price} \times \text{quantity}$$

- Net profit

$$\text{net profit} = \text{gross profit} - \text{other expenses and interest}$$

- Break even (BE)

$$\text{break even unit} = \frac{\text{fixed costs}}{(\text{sales price} - \text{variable cost})}$$

- Net profit margin

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

- break even costs / revenue = the break even units / sales price

- Margin of safety

$$\text{Margin of safety} = \text{actual sales} - \text{break even sales}$$

- Interest (on loans)

$$\text{interest (on loans) in \%} = \frac{\text{total repayment} - \text{borrowed amount}}{\text{borrowed amount}} \times 100$$

- Net cash flow

$$\text{net cash flow} = \text{cash inflows (receipts)} - \text{cash outflow (payments)}$$

- Opening + closing balance

$$\text{Opening balance} = \text{closing balance of previous period}$$

$$\text{Closing balance} = \text{opening balance} + \text{net cash flow}$$

- Profit

$$\text{profit/loss} = \text{total revenue} - \text{total costs}$$

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

- Gross profit

$$\text{gross profit} = \text{sales revenue} - \text{costs of sales}$$