# Formulae

You will not be given these formulae in the exam, so you need to learn them!

**LEARN IT!**

### Total costs

Total costs (TC) = Total fixed costs (TFC) + Total variable costs (TVC)

### Variable costs

Variable costs = Cost of one unit × Quantity produced

### Revenue

Revenue = Price × Quantity

### Break-even

$$\text{Break-even point in units} = \frac{\text{Fixed costs}}{(\text{Sales price} - \text{Variable cost})}$$

Break-even point in costs / Revenue = Break-even point in units × Sales price

### Margin of safety

Margin of safety = Actual or budgeted sales − 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

Net cash flow = Cash inflows (receipts) − Cash outflows in a given period (payments)

### Opening and closing balances

Opening balance = Closing balance of the previous period

Closing balance = Opening balance + Net cash flow

### Profit

Profit / loss = Total revenue − Total costs

### Gross profit

Gross profit = Sales revenue − Cost of sales

### Gross profit margin

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

### Net profit

Net profit = Gross profit − Other operating expenses and interest

### Net profit margin

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

### Average rate of return

$$\text{Average rate of return (\%)} = \frac{\text{Average annual profit (Total profit / No. of years)}}{\text{Cost of investment}} \times 100$$

### Percentage growth

$$\text{Percentage growth} = \frac{\text{Increase in size}}{\text{Original size}} \times 100$$