1. Calculate with Money

This includes calculating:

- Total cost
- Change
- Discounts
- Profit and loss
- · Percentage increase/decrease
- Interest (simple and compound)

A. Total Cost and Change

Example 1: A sandwich costs \$3.50 and a drink costs \$1.75. How much is the total cost?

Solution:

Total Cost =
$$3.50 + 1.75 = 5.25$$

Example 2: If you pay with a \$10 note, how much change will you get?

Change =
$$10.00 - 5.25 = 4.75$$

✓ B. Discounts

Formula:

\text{Discount} = \frac{\text{Discount %}}{100} \times \text{Original Price}

Example: A jacket costs \$80. There is a 25% discount. What is the discounted price?

$$Discount = \frac{25}{100} \times 80 = 20$$

Discounted Price =
$$80 - 20 = 60$$

- C. Profit and Loss
- Profit = Selling Price Cost Price
- Loss = Cost Price Selling Price
- Percentage Profit or Loss:

$$\text{Percentage Profit} = \left(\frac{\text{Profit}}{\text{Cost Price}}\right) \times 100$$

Example: You buy a phone for \$200 and sell it for \$250. What is the profit and profit percentage?

$$Profit = 250 - 200 = 50$$

$$ext{Profit }\% = \left(rac{50}{200}
ight) imes 100 = \boxed{25\%}$$

D. Simple Interest

Formula:

$$\text{Simple Interest} = \frac{P \times R \times T}{100}$$

Where:

- P = Principal (starting amount)
- R = Rate of interest (% per year)
- T = Time (years)

Example: Find the simple interest on \$1000 for 3 years at 5% per annum.

$$\mathrm{SI} = \frac{1000 \times 5 \times 3}{100} = \boxed{\$150}$$



2. Currency Conversion

Use the exchange rate to convert between currencies.



A. Converting from One Currency to Another

Formula:

Amount in new currency = Amount in original currency \times Exchange rate

The exchange rate is usually written like:

1 USD = 0.75 GBP

This means 1 US Dollar is worth 0.75 British Pounds.

Example 1: Convert \$200 into pounds using the rate: 1 USD = 0.75 GBP

$$200 imes 0.75 = \boxed{\pounds150}$$

Example 2: Convert £160 into dollars using the same rate.

Since 1 USD = 0.75 GBP,

To go from GBP to USD, divide:

$$160 \div 0.75 = \boxed{\$213.33}$$

Tips:

- If going from your currency to foreign, multiply.
- If going from foreign to your currency, divide.