Percentage Profit

Profit is the difference between money coming in and costs.

If a company earns £120,000 but has costs of £95,000 then the profit is £25,000.

To calculate the percentage profit:

$\frac{25,000}{120,000} \times 100 = 20.83333$ = 21%

Interest

When you put money in a bank, the bank will usually pay interest. This is a percentage usually about 2% to 5%. There are two ways interest can be calculated.

Simple Interest

This is a fixed amount of interest paid annually. It is usually a percentage of the amount of money.

Calculate the Simple interest on £6,000 invested for 3 years at an interest rate of 4%.

Find 4% of £6,000

$$\frac{4}{100} \times 6000 = 0.04 \times 6000 = 240$$

£240 is the annual interest the bank will pay you. You earn this for each of the 3 years.

$$£240 \times 3 = £720$$

Total interest is £720, and the investment is now worth £6,720
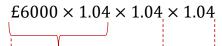
Compound Interest

You receive interest on the money in the account, including interest on previously earned interest.

Calculate the Compound interest on £6,000 invested for 3 years at an interest rate of 4%.

The amount increased by 4%. A 4% increase is 104%

To find 104% of a number, multiply by $\frac{104}{100} = 1.04$.

$£6000 \times 1.04 \times 1.04 \times 1.04$

$= £6,240$
Total after 1year

$£6,240 \times 1.04$
$= £6,489.60$
Total after two years

$£6,489.60 \times 1.04 = £6,749.18$
Total after three years

Total interest is £749.18, and the investment is now worth £6,749.18