

GCSE Maths – Ratio, Proportion, and Rates of Change

Simple Percentage Interest

Worksheet

NOTES



SOLUTIONS



This worksheet will show you how to work out different types of simple percentage interest questions. Each section contains a **worked example**, a **question with hints** and then **questions for you to work through** on your own.

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Section A

Worked Example

Hana deposits £800 in a bank that pays 4.5% simple interest a year. Work out the interest paid by the bank in 3 years.

Step 1: Convert percentage to decimal.

$$4.5\% = 0.045$$

Step 2: Multiply the decimal by the given amount.

$$0.045 \times 800 = 36$$

This means that there is an increase of £36 per year.

Step 3: Multiply the amount of interest by the given time period.

$$36 \times 3 = 108$$

The interest for saving for 3 years is **£108**.

Guided Example

Chloe loans £5500 from a bank where the cost of borrowing is 3% per year. Calculate the amount of simple interest Chloe pays in 6 years.

Step 1: Convert percentage to decimal.

Step 2: Multiply the decimal by the given amount.

Step 3: Multiply the amount of interest by the given time period.



Section B

Worked Example

The bank offers 2.5% simple interest per annum. Oliver invests £11000 at this bank. Calculate the total sum of amount in his account after 5 years.

Step 1: Convert the percentage to decimal.

$$2.5\% = 0.025$$

Step 2: Multiply the decimal by the given amount.

$$0.025 \times 11000 = 275$$

This means that there is £275 per year.

Step 3: Multiply the amount of interest by the time period.

$$275 \times 5 = 1375$$

The interest for saving for 5 years is £1375

Step 4: To calculate the total sum of money, add the interest to the starting sum.

$$1375 + 11000 = 12375$$

After 5 years, there will be **£12375** in Oliver's bank account.

Guided Example

Ryan deposits £7500 in a bank that pays 4.6% simple interest a year. Calculate the total sum of amount in Ryan's account after 2 years.

Step 1: Convert the percentage to decimal.

Step 2: Multiply the decimal by the given amount.

Step 3: Multiply the amount of interest by the given time period.

Step 4: To calculate the total sum of money, add the interest to the starting sum.



Now it's your turn!

If you get stuck, look back at the worked and guided examples.

5. Katy deposits £7070 in a bank that pays 3.4% simple interest a year. Calculate the total sum of amount in Katy's account after 3 years.
6. The bank offers 2.5% simple interest per annum. Ian invests £11000 at this bank. Calculate the total sum of amount in his account after 5 years.
7. Amelia deposits £7500 in a bank that pays 4.6% simple interest a year. Calculate the total sum of amount in Amelia's account after 2 years.
8. Saarah invests £5000 in a bank charging 4.4% simple interest a year. Maryam invests £4600 in a different bank charging 6.9% simple interest a year. Who earns the most after 8 years?

