

Simple and compound interest

Simple interest :

- $SI = \frac{P \times N \times R}{100}$

WHERE;

P= Principal (The money invested)

N= the number of years for which the money is invested

R= rate of interest per year.

- **Amount = P+I**

WHERE;

P= Principal (The money invested)

I= Simple Interest

Compound Interest :

- $CI = A - P$

WHERE;

A=The is the total money and is equal to Principal + Interest.

P= The money invested is called as the principal

- **Amount= $P(1 + \frac{r}{100})^n$**

- WHERE;

- P= Principal (The money invested)

- N= the number of years for which the money is invested

EXAMPLES:

0580/2, 0581/2 Jun/04

- 9 Sara has \$3000 to invest for 2 years.
She invests the money in a bank which pays simple interest at the rate of 7.5% per year.
Calculate how much interest she will have at the end of the 2 years.

Answer \$ [2]

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- 10 Shania invests \$750 at a rate of $2\frac{1}{2}\%$ per year simple interest.
Calculate the total amount Shania has after 5 years.

Answer \$ [3]

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- 9 Eva invests \$120 at a rate of 3% per year compound interest.
Calculate the total amount Eva has after 2 years.
Give your answer correct to 2 decimal places.

Answer \$ [3]

NORTH EASTERN BANK
SAVINGS ACCOUNT

5%

Per Year
Simple Interest

SOUTH WESTERN BANK
SAVINGS ACCOUNT

4.9%

Per Year
Compound Interest

Kalid and his brother have \$2000 each to invest for 3 years.

0580/02/J/07

- (a) North Eastern Bank advertises savings with **simple** interest at 5% per year. Kalid invests his money in this bank. How much money will he have at the end of 3 years?

Answer(a)\$ [2]

- (b) South Western Bank advertises savings with **compound** interest at 4.9% per year. Kalid's brother invests his money in this bank. At the end of 3 years, how much **more** money will he have than Kalid?

Answer(b)\$ [3]

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- 11 Boris invests \$280 for 2 years at a rate of 3% per year compound interest.

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Calculate the interest Boris receives at the end of the 2 years.
Give your answer correct to 2 decimal places.

Answer \$ [4]

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- 17 Alex invests \$200 for 2 years at a rate of 2% per year simple interest.
Chris invests \$200 for 2 years at a rate of 2% per year compound interest.

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Calculate how much more interest Chris has than Alex.

Answer \$ [4]