

Simple and Compound Interest

For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **25**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method. You may use a calculator.

- 1** Priya puts £1850 into a savings account that pays 2.4% simple interest per year. She leaves the money there for 3 years. How much money will be in the account after 3 years?

£
(3)

(Total for Question 1 is 3 marks)

- 2** Marcus invests £1200 at 3.5% simple interest per year. He receives a total of £210 in interest.

For how many years did Marcus invest the money?

..... years
(3)

(Total for Question 2 is 3 marks)

- 3** The value of a rare coin increases by 7% each year.
The coin is worth £640 today.
Work out the value of the coin in 2 years' time.

£
(3)

(Total for Question 3 is 3 marks)

- 4** Hana invests £2750 in a savings bond for 4 years.
The bond pays 3.6% compound interest per year.
Work out the total amount of interest Hana earns.

£
(3)

(Total for Question 4 is 3 marks)

- 5** A machine costs £12 000
Its value depreciates by 10% each year.
Work out the value of the machine after 3 years.

£
(3)

(Total for Question 5 is 3 marks)

- 6** A beekeeper has 8000 bees in a hive.
The number of bees increases by 5% each week for 3 weeks.
Work out the number of bees in the hive at the end of the 3 weeks.

.....
(3)

(Total for Question 6 is 3 marks)

- 7** A painting was valued at £3500
In the first year, the value of the painting went up by 12%
In the second year, the value of the painting went down by 5%
Work out the value of the painting at the end of the second year.

£
(3)

(Total for Question 7 is 3 marks)

8 Nia wants to save £4000 for 3 years.

Fixed account
3% per year
simple interest

Saver account
2.9% per year
compound interest

Which account will give Nia more money at the end of 3 years?
You must show how you get your answer.

(4)

(Total for Question 8 is 4 marks)
