

1MA1 Foundation themed papers: Savings

Write your name here			
Surname	Other names		
Centre Number		Candidate Number	
Pearson Edexcel Level 1/Level 2 GCSE (9–1)			
Mathematics			
Savings			
			Paper Reference 1MA1
You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.			Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

Information

- The total mark for this paper is **16**. There are **5** questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by all students in the June 2017–November 2019 examinations.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

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- 1** Remi invests £600 for 5 years in a savings account.
By the end of the 5 years he has received a total of £75 simple interest.
Work out the annual rate of simple interest.

.....%

(Total for Question 1 is 3 marks)

- 2** Maria invests £4500 in a savings account for 3 years.
The account pays simple interest at a rate of 1.8% per year.
Work out the total amount of interest Maria gets by the end of the 3 years.

£.....

(Total for Question 2 is 2 marks)

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3 Anil wants to invest £25 000 for 3 years in a bank.

<p>Personal Bank</p> <p>Compound Interest</p> <p>2% for each year</p>
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<p>Secure Bank</p> <p>Compound Interest</p> <p>4.3% for the first year 0.9% for each extra year</p>
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Which bank will give Anil the most interest at the end of 3 years?
You must show all your working.

(Total for Question 3 is 3 marks)

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- 4 Northern Bank has two types of account.
Both accounts pay compound interest.

<p>Cash savings account Interest 2.5% per annum</p>
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<p>Shares account Interest 3.5% per annum</p>
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Ali invests £2000 in the cash savings account.
Ben invests £1600 in the shares account.

- (a) Work out who will get the most interest by the end of 3 years.
You must show all your working.

(4)

In the 3rd year the rate of interest for the shares account is changed to 4% per annum.

- (b) Does this affect who will get the most interest by the end of 3 years?
Give a reason for your answer.

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(1)

(Total for Question 4 is 5 marks)

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- 5** Katy invests £200 000 in a savings account for 4 years.
The account pays compound interest at a rate of 1.5 % per annum.
Calculate the total amount of interest Katy will get at the end of 4 years.

£.....

(Total for Question 5 is 3 marks)

TOTAL MARKS FOR PAPER: 16