Surname		Other Names	
Centre Number		Candidate Number	
Candidate Signature			

CALCULATING FINANCES   **6984/2**
Unit 4

AQA
ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Wednesday 31 January 2007   9.00 am to 10.15 am

For this paper you must have:
- a clean copy of the Data Sheet (enclosed)
- a calculator
- a protractor
- a ruler.

For Examiner's Use			
Question	Mark	Question	Mark
1		9	
2		10	
3			
4			
5			
6			
7			
8			
Total (Column 1) →			
Total (Column 2) →			
TOTAL			
Examiner's Initials			

Time allowed: 1 hour 15 minutes

Instructions
- Use blue or black ink or ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- Answer the questions in the spaces provided.
- Do all rough work in this book. Cross through any work you do not want to be marked.
- You may **not** refer to the copy of the Data Sheet that was available prior to this examination. A clean copy is enclosed for your use.

Information
- The maximum mark for this paper is 50.
- The marks for questions are shown in brackets.
- You are expected to use a calculator where appropriate.

Advice
- In all calculations, show clearly how you work out your answer.

6984/2

SECTION A

Answer **all** questions in the spaces provided.

Use **Cost of protection payments** *on page 2 of the Data Sheet.*

---

1 James wishes to borrow £5000 to buy a car and repay the loan over three years.

(a) (i) Which company charges the most for insurance?

....

Answer...

(1 mark)

(ii) How much each month is this insurance on the cost of the loan?

....

....

....

Answer...

(2 marks)

(b) James decides to obtain his loan from Barclays Bank.

How much per month does the insurance cost?

....

....

....

Answer...

(2 marks)

(c) How much in total is the insurance?

....

....

....

Answer...

(2 marks)

(d) Express the cost of the insurance as a percentage of the amount borrowed.
Give your answer correct to 3 significant figures.

....

....

....

Answer...

(3 marks)

10

Turn over for the next question

Turn over ▶

SECTION B

Answer **all** questions in the spaces provided.

Use **Visitors to the UK** *on page 2 of the Data Sheet.*

2 A spreadsheet is used to calculate the amount spent by each visitor whilst in the UK.

	A	B	C	D
1	**Country from which visitor came**	**Number of visitors (thousands)**	**Total amount spent in the UK (£ millions)**	**Average amount spent per visitor**
2	USA	3346	2318	
3	France	3073	823	
4	Germany	2611	694	
5	Ireland	2488	682	
6	Netherlands	1549	535	

(a) Complete the spreadsheet to give the average amount spent per visitor.
Give the average amount spent to the nearest pound.

(4 marks)

Space for working

....

....

....

....

....

....

(b) State a formula which would give the content of cell D3.

....

Answer...

(1 mark)

(c) Using the values you have found in the spreadsheet, make two comments about the spending patterns of visitors to the UK.

Comment 1

....

....

Comment 2

....

....

(2 marks)

7

3 In a hotel in London, there was a total of 88 visitors from France and Germany.
The ratio of the numbers of visitors from these countries was 5 : 3, with more visitors coming from France.

How many visitors were from Germany?

....

....

....

....

(3 marks)

3

Turn over for the next question

Turn over ▶

SECTION C

Answer **all** questions in the spaces provided.

Use **Graduate debt** *on page 3 of the Data Sheet.*

4 (a) In which twelve-month period did the graduate debt increase the most?

....

Answer..

(2 marks)

(b) State how you would recognise this from the graph.

....

....

....

....

(1 mark)

3

5 The Office for National Statistics calculated that, in 2005, the total value of Britain was £5840 billion. It stated that this was equal to nearly £97 000 for every person in the country.

Note: 1 billion is 1000 million.

(a) Which two numbers would you use to **estimate** the number of people in Britain?

Answer................................ and................................

(1 mark)

(b) Use your two numbers to **estimate** the population of Britain in 2005.

....

....

....

Answer..

(2 marks)

3

SECTION D

Answer **all** questions in the spaces provided.

Use **Taxation 2006–2007** *on page 4 of the Data Sheet.*

6 Henry earned £3420 per month and had a tax free allowance of £5035.

Calculate:

(a) Henry's taxable income;

....

....

....

Answer..

(3 marks)

(b) the amount of income tax which Henry paid in the year.

....

....

....

....

....

....

....

....

Answer..

(5 marks)

8

Turn over ▶

7   Mustafa earns £ 326 per week.
Mustafa is not contracted out for national insurance contributions.

Calculate the amount Mustafa pays weekly in national insurance contributions.

....

....

....

Answer..
(4 marks)

4

SECTION E

Answer **all** questions in the spaces provided.

8 In 2005, Britons sent 25 billion text messages. This was an increase of 22% on the number sent in 2004.

How many texts were sent in 2004?

Note: 1 billion is 1000 million.

....

....

....

Answer..

(3 marks)

3

9 Coleen went to New York and bought a designer handbag for £322.
Since this was over her duty free allowance, she had to pay 14.7% import duty at Heathrow airport.
In addition, she was charged 17.5% VAT on the total of the original price and the import duty.

What percentage of the New York cost did she have to pay at Heathrow?

....

....

....

....

....

Answer..

(4 marks)

4

Turn over ▶

10 Francine sells S handmade sarongs on the beach in France at c euros each. This price includes VAT at $V\%$.

The total VAT is given by $\dfrac{ScV}{100 + V}$ euros.

(a) Francine sells 30 sarongs at 20 euros each. The rate of VAT is 19.6%.

What is the total VAT paid?

....

....

....

Answer...

(2 marks)

(b) On the same beach, Angelique sells bracelets at 25 euros each. The rate of VAT is 19.6%.
The total VAT on the sale of these bracelets is 1225 euros.

Using a similar formula to that given in part (a), calculate how many of these bracelets Angelique sells.

....

....

....

Answer...

(3 marks)

5

END OF QUESTIONS

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Free-Standing Mathematics Qualification
January 2007
Intermediate Level

CALCULATING FINANCES   **6984/2PM**
Unit 4

PRELIMINARY MATERIAL

DATA SHEET

To be issued to candidates between Wednesday 17 January 2007 and Wednesday 24 January 2007

6984/2PM

Cost of protection payments

The cost of borrowing money depends on the amount borrowed, the length of the repayment period and the interest rate. The cost of monthly payments also depends on whether or not the person borrowing money requires insurance which would pay the premium if he/she were made redundant or became unable to work.

Typical loan repayments based on a £5000 loan repaid over three years for five different lenders are:

Lender	Monthly payments (£)	
	With insurance	Without insurance
Bank of Scotland	200.87	162.77
Barclays Bank	202.69	173.26
Giraffe Loans	166.51	150.91
Lombard Direct	167.95	152.60
Nationwide Building Society	167.06	153.25

Data correct as of 1.8.2005

Visitors to the UK

The number of visitors to the UK in 2003 was recorded together with the amount, in total, which they spent whilst in the UK.

Country from which visitor came	Number of visitors (thousands)	Total amount spent in the UK (£ millions)
USA	3346	2318
France	3073	823
Germany	2611	694
Ireland	2488	682
Netherlands	1549	535

Graduate debt

The graph shows the average debt of a graduate on graduation.

£ thousand

Source: GFK Financial

Graduate debt levels
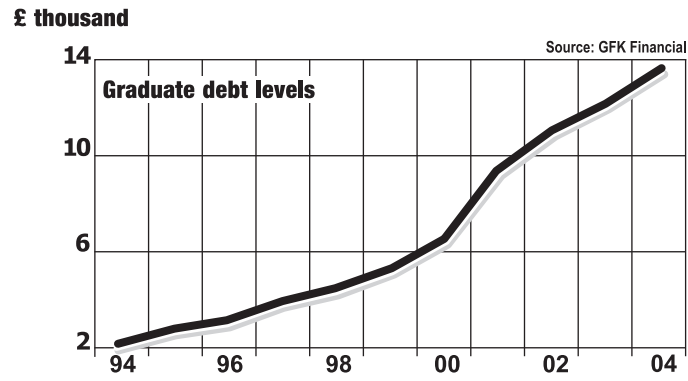
Turn over

Turn over ▶

Taxation 2006–2007

Value Added Tax (VAT)

The standard rate is 17.5%.
The rate for fuel is 5%.

Income Tax 2006–07

How your tax is calculated:
Find your taxable income by subtracting your tax free allowance from your annual income.
You pay income tax at 10% on the first £2150 of your taxable income.
You pay income tax at 22% on the next £31150 of your taxable income.
You pay income tax at 40% on your taxable income above £33300.

National Insurance 2006–07

Rates of national insurance are:

0% on income up to £97 per week or £420 per month;

11% (contracted out 9.4%) on income between £97 and £645 per week
or between £420 and £2795 per month;

1% on income over £645 per week or over £2795 per month.

If an employee has entered an occupational pension scheme, the employee may 'contract out' and pay national insurance at a lower rate. In this case, the employee will receive, from the state, only the basic state retirement pension.

END OF DATA SHEET