AQA

FSMQ
FINANCIAL CALCULATIONS
Level 2

Thursday 26 May 2016   Morning   Time allowed: 1 hour 15 minutes

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

Instructions
- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Answer **all** questions.
- You must answer each question in the space provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work that 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 marks for questions are shown in brackets.
- The maximum mark for this paper is 50.
- You are expected to use a calculator where appropriate.

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

There are no questions printed on this page

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ANSWER IN THE SPACES PROVIDED

Section A

Answer **all** questions.

Answer each question in the space provided for that question.

*Use **Jeans** on page 2 of the Data Sheet.*

1   Arthur buys 510 pairs of jeans for £5600

He sells $\frac{2}{3}$ of the pairs of jeans at £24 a pair.

Arthur then reduces the price to £15 a pair.
He sells 80 pairs at this reduced price.
A market trader buys the rest of the pairs of jeans from Arthur for £500

1 (a)   How much does Arthur receive in total?

[5 marks]

_____

_____

_____

_____

_____

_____

Answer £_____

1 (b)   Find the percentage profit which Arthur makes.

[3 marks]

_____

_____

_____

Answer _____ %

Turn over ▶

8

Section B

Answer **all** questions.

Answer each question in the space provided for that question.

*Use **Spanish holiday** on page 2 of the Data Sheet.*

2 (a)   One evening, Jack and Lorna go out for dinner.
The price of their dinner is €32 **each**.
A service charge of 15% is added to the price.

Work out the **total** cost of the dinner for the couple.

[3 marks]

_____

_____

_____

Answer €_____

2 (b)   On another evening, they pay a total of €84 for their dinner.
This includes a service charge of 12%

How much is the service charge?

[3 marks]

_____

_____

_____

_____

Answer €_____

2 (c) Jack and Lorna pay a total of €180 for a coach tour to see the local area.
The exchange rate is €1.28 to £1

How much is €180 in pounds?

[3 marks]

_____

_____

_____

_____

Answer £_____

Turn over for the next question

9

Turn over ▶

Section C

Answer **all** questions.

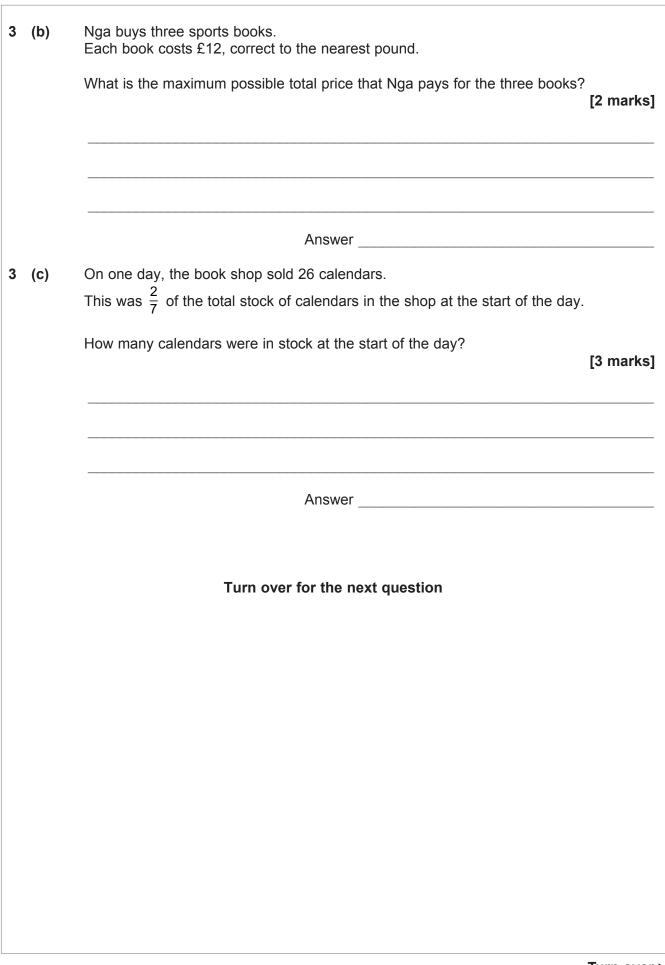Answer each question in the space provided for that question.

*Use **Books** on page 2 of the Data Sheet.*

3 (a)

	A	B	C	D
1	**Pack**	**Recommended retail price (£)**	**Sale price (£)**	**Sale price as a percentage of recommended retail price**
2	Mr. Men & Little Miss All New Story Collection	104	25	
3	Diary of a Wimpy Kid Collection	47.99	8.99	
4	Alice Thomas Ellis Set	22.99	4.99	
5	The Top Gear Guide To Britain	14.99	3.99	

Complete column D of the spreadsheet.
Give the percentages to the nearest integer.

[4 marks]

3 **(b)** Nga buys three sports books.
Each book costs £12, correct to the nearest pound.

What is the maximum possible total price that Nga pays for the three books?

[2 marks]

_____

_____

_____

Answer _____

3 **(c)** On one day, the book shop sold 26 calendars.

This was $\frac{2}{7}$ of the total stock of calendars in the shop at the start of the day.

How many calendars were in stock at the start of the day?

[3 marks]

_____

_____

_____

Answer _____

Turn over for the next question

9

Turn over ▶

Section D

Answer **all** questions.

Answer each question in the space provided for that question.

*Use **Sway Credit Finance** on page 3 of the Data Sheet.*

4   Liu wants to borrow £4000 to buy a car. She decides to repay the loan over 24 months.

4 (a)   What monthly repayment will Liu make?
Circle your answer.

£372.62   £204.73   £179.09   £166.67

[1 mark]

4 (b)   By finding the total repayments that Liu will make to repay the loan, calculate the total interest that she will be charged for borrowing this money.

[3 marks]

_____

_____

_____

Answer _____

4 (c)   Express the total interest that Liu will be charged for borrowing this money as a percentage of the amount borrowed.

[2 marks]

_____

_____

_____

Answer _____

6

Section E

Answer **all** questions.

Answer each question in the space provided for that question.

Use **Taxation 2015–2016** *on page 4 of the Data Sheet.*

5   In the tax year 2015–2016, Molly had a tax-free allowance of £10 600 and earned £4629 per month.

5 (a)   Calculate Molly's taxable income.

[3 marks]

_____

_____

_____

_____

Answer _____

5 (b)   Calculate the total amount of income tax which Molly paid in the year.

[5 marks]

_____

_____

_____

_____

_____

_____

_____

_____

Answer _____

Turn over ▶

6 In the tax year 2015–2016, Dmitry earned £397 per week.
Dmitry was not contracted out for National Insurance contributions.

Calculate the amount which Dmitry paid per week in National Insurance contributions.

[4 marks]

_____

_____

_____

_____

Answer _____

4

Section F

Answer **all** questions.

Answer each question in the space provided for that question.

7 A shopkeeper normally sells ladies' dresses at a price which includes a mark-up of 65% for profit. In a sale, the shopkeeper reduces all her prices by $\frac{1}{3}$

What is the percentage profit the shopkeeper makes when a dress is sold in the sale?

[3 marks]

_____

_____

_____

_____

Answer _____

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3

</div>

8 A savings account pays interest at a fixed rate of 0.26% per month.

After n years, the amount of money, £P, in the account from an investment of £S is given by

$$P = S \times 1.0026^{12n}$$

Ethan invests £4500 for 1 year.

Use the formula to calculate the total amount of money which Ethan will have at the end of the year.

[3 marks]

_____

_____

_____

_____

Answer _____

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END OF QUESTIONS

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