

# **OXFORD CAMBRIDGE AND RSA EXAMINATIONS** LEVEL 1 FUNCTIONAL SKILLS MATHEMATICS

09865

#### TASK AND ANSWER BOOKLET

**TIME: 1 HOUR 30 MINUTES** 

INSTRUCTIONS				
Fill in all the boxes below. Make s <b>LETTERS</b> .	ure your personal details are entered	d correctly. U	se <b>BLO</b> (	СК
Your surname or family name				
Your first forename (if any)				
Your second forename (if any)				
Date of birth				
Centre name				
Centre number				
Your OCR candidate number		FOR EXAMINER USE ONLY		
At the beginning of this booklet yo		Question No	Mark	Total
Documents. You will need to refe	r to these documents to		TASK A	
complete the tasks.		Q1	/1	
You will also need:		Q2	/3	
<ul> <li>a pen with black ink</li> </ul>		Q3 Q4	/3	
<ul> <li>a calculator</li> </ul>		Q5	/7	
<ul><li>a ruler</li></ul>		Checking	/2	/20
VOLUME 4 HOUR AND 20 I	MINUTES TO COMPLETE THE		TASK B	
THREE TASKS	MINUTES TO COMPLETE THE	Q6	/3	
THREE TASKS		Q7	/3	
For each task, make sure that you	:	Q8	/8	
<ul> <li>read the questions carefully be</li> </ul>	fore starting	Q9	/4	/20
• write your answers in this book	let	Checking	/2 TASK C	720
· clearly show how your working	leads to your answers	040	I ASK C	

This document consists of 24 pages. Any blank pages are indicated.

checked your work.

2 marks are available in each task when you show you have

When you have finished, hand this booklet and all the

Ofqual Qualification Reference Number: 500/8910/9

Resource Documents to the supervisor.

Q10

Q11

Q12

Q13

Checking

Total

/4

/6

/4

/4

/2

/60

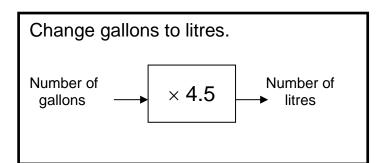
/20

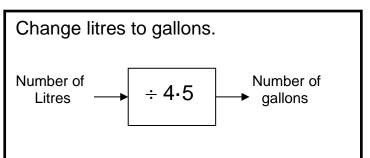
#### TASK A - HAPPY HOUR

#### **RESOURCE DOCUMENT 1**

# Diesel price for 1 litre







# Manufacturer's figures for the diesel Sedan

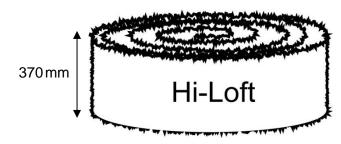
Type of driving	Number of miles driven on one gallon	Number of litres to drive 100 kilometres
Around town (urban)	45	6.3
Motorways and main roads (extra urban)	67.5	4.2
Combined	54	5.2

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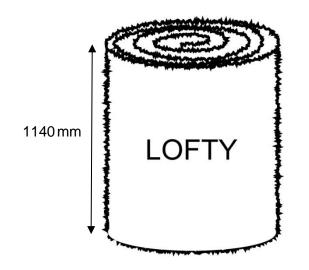
#### **TASK B - LOFT INSULATION**

#### **RESOURCE DOCUMENT 1**

- Loft insulation can be laid flat with its edges touching
- Loft insulation can be cut with scissors
- The full depth of loft insulation can be built up in layers



Details of Hi-Loft Roll 370 mm wide 4 m long 200 mm thick £9.98 per roll



Details of Lofty Roll 1140 mm wide 4 m long 100 mm thick £6.00 per roll



Details of Snugglewrap Roll 370 mm wide 5.3 m long 160 mm thick £7.50 per roll

	Note:	
1000 m	=	1 km
100 cm	=	1 m
10 mm	=	1 cm

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#### **TASK C - HOLIDAY MONEY**

#### **RESOURCE DOCUMENT 1**



# CAFÉ MATTERHORN MENU

PRICE (CHF)

### DRINKS

BEER 3.80

COFFEE 2.80

COFFEE WITH MILK 3.80

HOT CHOCOLATE 4.20

APPLE JUICE 3.80

### FOOD

APPLE STRUDEL 7.30

PLUM TART 6.00

ROSTI 5.00

PIZZA 8.50





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#### **RESOURCE DOCUMENTS**

The Resource Documents on pages 3, 5 and 7 contain information to help you to answer the tasks in this booklet.

- The resource documents are perforated along the left hand side, so they can be removed from the task and answer booklet.
- Your supervisor will instruct you when to remove the resource documents, before you start the assessment.
- Please fold pages 3, 5 and 7 along the perforated strip before removing from the task and answer booklet.

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### **TASK AND ANSWER PAGES**

Do not turn over this page until you are told to do so by your supervisor.

# TASK A – Happy Hour

# You will need Task A Resource Document 1

	(1 mark)
What is the cost of one <b>gallon</b> of diesel?	
	(3 marks)

Geoff dr	ives 250 miles around town and uses half a tank of diesel.	
Q3	About how many litres of diesel does the tank hold when full? Explain your answer.	
	(3 marks)	Examiner use only (Q3)
price of	garage has a "Happy Hour" between 12:00 and 13:00, when it sells fuel at "2p off" the each complete litre. es in the town and 5 km from the garage.	
Q4	How many litres of diesel does Geoff use when he drives from home to the garage and back?	
	(4 marks)	Examiner use only
		use only (Q4)

Geoff and Tina are talking about the offer.



This is a really good deal. It's worthwhile buying diesel in the Happy Hour, even when I've got half a tank of fuel in the car already. I can save money.

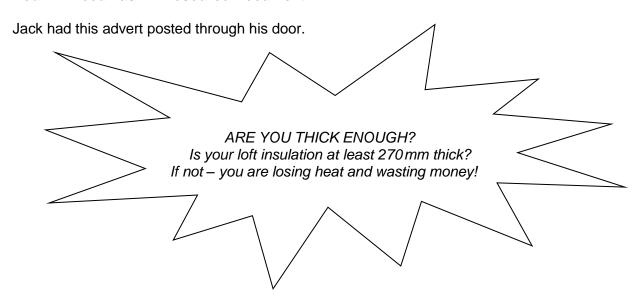
It's not worth it. The fuel you use going there will wipe out anything you save.

 (7 m outs
(7 marks
Question 5 plus 2 Checking mark

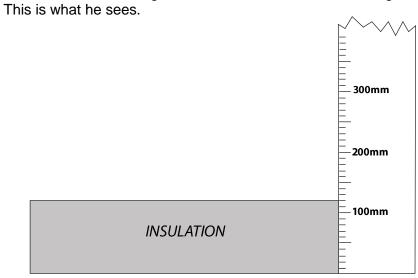
**END OF TASK A** 

#### **TASK B – Loft insulation**

#### You will need Task B Resource Document 1



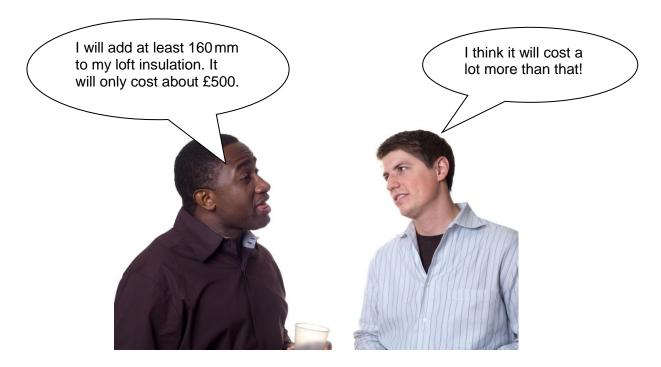
Jack decides to investigate his loft and measure the existing insulation.



Q6	(a)	How thick does the ruler show Jack's loft insulation is?		
			(1 mark	

(b) Why sho	ould Jack add extra insulation to his loft? Give a rea	addition your anower.
		(2 marks) Examuse
		(0
k measures his l	oft and draws this sketch.	
Г	15 m	
12 m		
	ea of Jack's loft? of your answer.	
		(3 marks) Examuse
		(0

Jack decides to lay some extra insulation in his loft and talks to his friend Phil.



Jack looks on the internet to find out the price of insulation.

28	(a)	Show that Jack's extra insulation will cost about £690 if he chooses Snugglewrap.
		(5 marks)

(b)	Jack does not want to pay this much for his extra insulation.  Explain whether using Hi-Loft or Lofty will give him a better deal.	
	(3 marks)	Examiner use only (Q8)
Jack insula	ates his loft and in the next year he saves £170 on his heating bill.	
Q9	After how many years will Jack's savings on his heating bill cover the cost of the extra insulation?	
	Explain your answer.	
		Examiner use only (Q9)
	(4 marks)	(49)
	Question 9 plus 2 Checking marks	Examiner use only (Checking
	Total marks	Examiner use only (Total)

**END OF TASK B** 

### **TASK C – HOLIDAY MONEY**

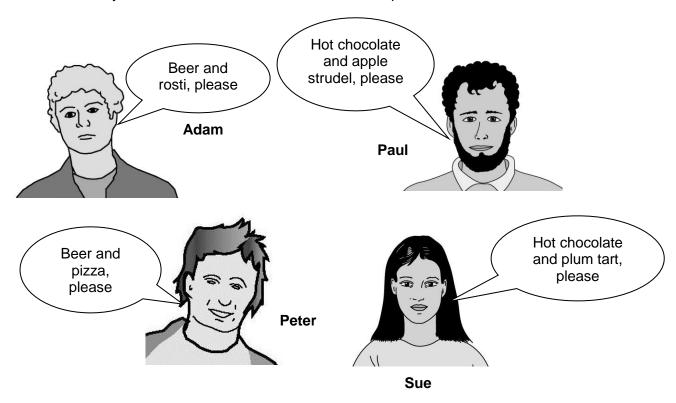
### You will need Task C Resource Document 1



Paul is on holiday in Switzerland where the money used is Swiss francs (CHF).

(a)	How many Swiss francs (CHF) did he get for each £1?	
		(2 marks)
D		(2)
Pau	l and his friends look at a menu in a café.	
(b)	What is the range of prices on the menu?	
(b)		(2 marks)

Paul is on holiday, in Switzerland with some friends who all place an order.



Paul has a 50 CHF note so he pays the bill for everyone.

 	(6 marks

Examiner use only (Q11)

Q11

Adam wants to give Paul £5.	
Can I give you £5 for my beer and rosti as I don't have any Swiss francs?  Paul  Adam	
Peter I think one of them is losing out.	
Q12 Show who is losing out.	
(4 marks)	Examine
	use only (Q12)

The top of the mountain is 4478 m above sea level and covered in snow.

The café is 3089 m above sea level.

A thermometer shows that it is 6°C outside the cafe.

Sue wonders what the temperature is on top of the mountain.

I think it must be -20°C at the top	The temperate falls by 6.5°C every 1000 m go up	for
Sue	Peter	

(4 marks)
Question 13 plus 2 Checking marks

**END OF TASK C** 



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