

OXFORD CAMBRIDGE AND RSA EXAMINATIONS

LEVEL 2 FUNCTIONAL SKILLS MATHEMATICS

09866

TASK AND ANSWER BOOKLET

This assessment may be taken within these dates:

4 – 8 APRIL 2011

TIME: 1 HOUR 30 MINUTES

INSTRUCTIONS

Fill in all the boxes below. Make sure your personal details are entered correctly. Use BLOCK LETTERS.

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		
Task No	Mark	Total
1a	/4	
1b	/3	
1c	/4	
1d	/7	
Checking	/2	/20
2a	/4	
2b	/6	
2c	/2	
2d	/6	
Checking	/2	/20
3a	/2	
3b	/2	
3c	/2	
3d	/12	
Checking	/2	/20
Total	/60	

YOU NEED

- This Task and Answer Booklet
- The Resource Booklet for this test
- A pen with black ink
- A calculator
- A ruler

YOU HAVE 1 HOUR AND 30 MINUTES TO COMPLETE THE 3 TASKS.

- Read the tasks inside this booklet carefully before starting the tasks
- Write your answers in this booklet
- **For each task, clearly show how your working leads to your answer**
- When you have finished, hand this booklet to the supervisor

Ofqual Qualification Reference Number: 500/8908/0

H589 APR11

This document consists of 11 printed pages and 1 blank page

Task 1 – Making lunch

**You must clearly show how your working leads to each answer.
2 marks are available in each task when you show you have checked your work.**

Omar works in an office from Monday to Friday each week.
He goes out to a sandwich shop each day to buy his lunch.
Each day Omar buys the Meal Deal.

You will need
page 2 of the
Resource Booklet

- (a) (i)** How much does he spend at the sandwich shop each week?

(2 marks)

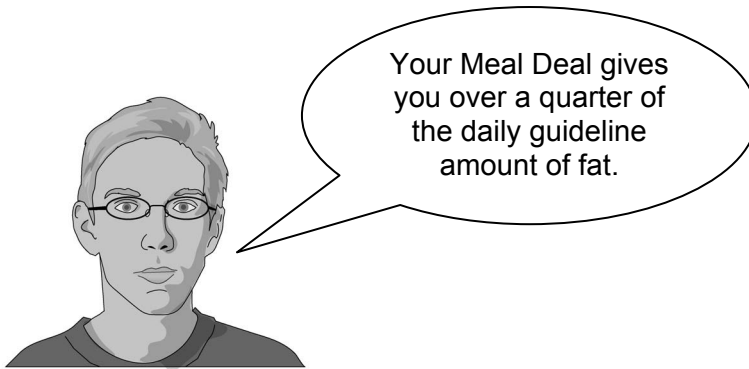
- (ii)** Omar has 4 weeks holiday from work each year.
How much does he spend at the sandwich shop in a year?

(2 marks)

Examiner
use only

Omar is worried that he is eating too much fat.
His favourite sandwich is cheese and tomato.

Ken says



(b) Is Ken correct?
Use calculations to justify your answer.

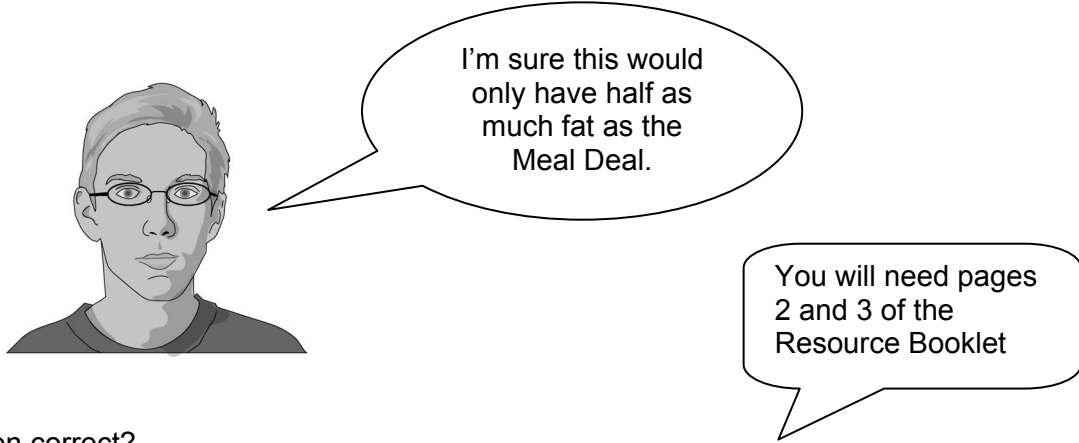
Examiner
use only

(3 marks)

Omar thinks his lunch might have less fat if he made it himself.
He finds some information from a supermarket website.

He uses low fat cheese to make a cheese and tomato sandwich.
He also takes a bag of crisps and a bottle of water.

Ken says



(c) Is Ken correct?
Explain how you get your answer.

Examiner
use only

(4 marks)

Task 2 – Using gas

**You must clearly show how your working leads to each answer.
2 marks are available in each task when you show you have checked your work.**

Alex uses gas in his home for heating, cooking and hot water.
He draws a graph showing the amount of gas he used each week in 2009.

You will need
page 4 of the
Resource Booklet

- (a) (i)** When Alex went on holiday, no gas was used in his home.
When was this?

(1 mark)

- (ii)** Alex did not use his heating in the summer.
In which month do you think he turned it back on again?

(1 mark)

- (iii)** During which month was the outside temperature probably the coldest?
Give a reason for your answer.

(2 marks)

Examiner
use only

You will need
page 5 of the
Resource Booklet

Alex is sent a gas bill every three months (one quarter of a year).
Gas suppliers charge by the number of kilowatt hours (kWh) used each quarter.

- (b) (i)** Show that Alex will pay about £42, including VAT, for the first 1143 units of gas he uses in each quarter.

(2 marks)

- (ii)** Find the total amount, including VAT, that Alex pays for gas for all four quarters of 2009.

Examiner
use only

(4 marks)

Task 3 – Trampoline

**You must clearly show how your working leads to each answer.
2 marks are available in each task when you show you have checked your work.**

Carla is a childminder.
She wants to put a trampoline in her garden.

You will need
page 6 of the
Resource Booklet

(a) How much does it cost Carla for the Superior trampoline and an anchor kit?

Examiner
use only

(2 marks)

Carla will make a circular safety area under and around the trampoline.
She must follow the safety surface guidelines.

(b) What is the smallest diameter the safety area can be?

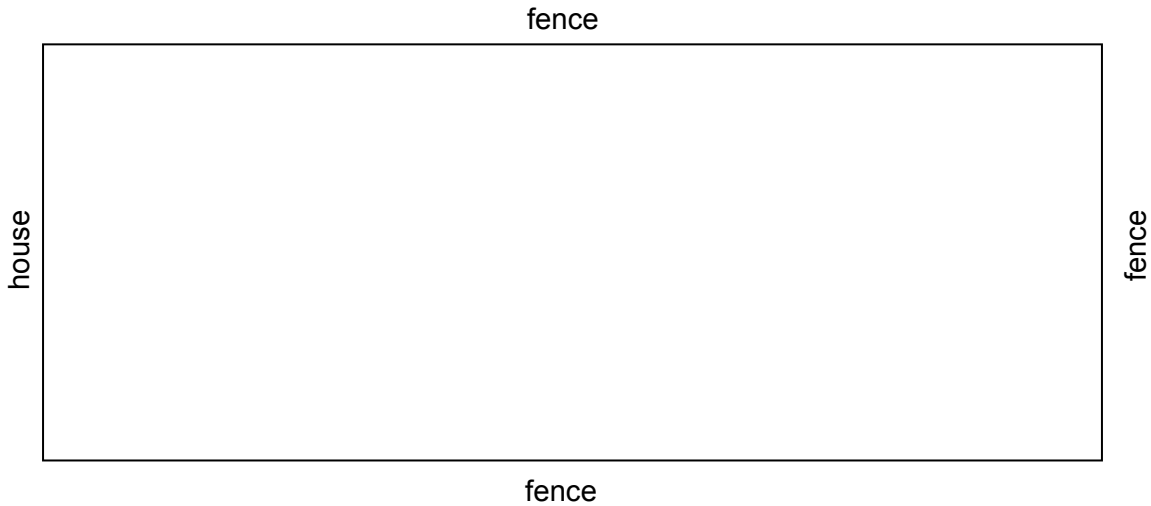
Examiner
use only

(2 marks)

This is a scale drawing of Carla's garden.
 The safety area will be more than 1 metre away from the house and any fence.

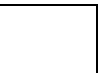
You will need pages 6 and 7 of the Resource Booklet

(c) Shade the region where **no part** of the safety area can be placed.



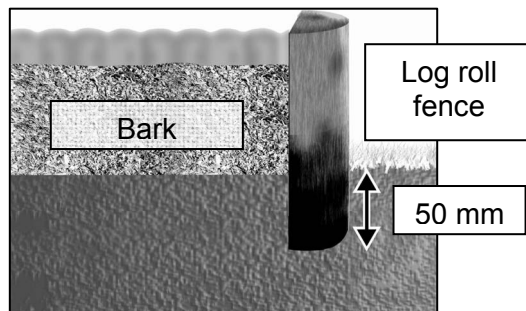
Scale: 1 cm to 2 m

Examiner use only



(2 marks)

Carla will put a low fence around the outside of the circular safety area.
 She will use log roll fencing for this.
 She will use *Play Bark* for the safety area surface.
 The height of the log roll fence must be greater than the safe depth of bark.
 The roll must also be buried at least 50 mm into the ground to keep it in place.



(d) (i) What height of log roll should Carla buy?

(2 marks)

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