

Write your name here

Surname

Other names

Edexcel
Functional Skills

Centre Number

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Candidate Number

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Mathematics

Level 1



17–21 June 2013

Time: 1 hour 30 minutes

Paper Reference

FSM01/01

You must have:

Pen, calculator, HB pencil, eraser, ruler graduated in cm and mm, protractor, compasses.

Total Marks

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My signature confirms that I will not discuss the content of the test with anyone until the end of the 5 day test window.

Signature: _____

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.
- Sign the declaration.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- **Calculators may be used.**

Information

- The total mark for this paper is 48.
- The marks for each question are shown in brackets – *use this as a guide as to how much time to spend on each question.*
- **Where you see this sign you must show clearly how you get your answers because marks will be awarded for your working out.**
- **Check your working and your answers at each stage.**



Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.

Turn over ►

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PEARSON

Section A: Surprise outing

Answer all questions in this section.

Write your answers in the spaces provided.

- 1 Tim plans a surprise for Jan.
They are going to London by coach for the surprise.

They must be in London by 4 pm.
Tim thinks 4 pm is the same as 14:00 hours.

(a) Is Tim correct?
Show why you think this. (1)

Write your answer in the box below.

Tim finds out the times of the coaches.

Basingstoke	08:30	10:25	12:30	16:25
London Victoria Coach Station	10:20	12:20	14:20	18:30

Tim decides to get the 10:25 coach to London.

(b) How long should the journey take on the 10:25 coach from Basingstoke to London? (3)

Use the box below to show clearly how you get your answer.



The total price for the coach tickets is normally £23

Coach tickets
Book in advance
Save 30%

Tim is going to book the tickets in advance.

(c) How much money does Tim save? (2)

Use the box below to show clearly how you get your answer.



(Total for Question 1 is 6 marks)



- 2 Tim is going to book a hotel, theatre tickets and dinner for himself and Jan. He finds these prices.

Option A

Hotel	£173.50 for 2 people
Theatre ticket and dinner	£25 per person

Option B

Theatre ticket and hotel	£132.25 per person
Dinner	£18.95 per person

Tim wants know the difference in price between option A and option B.

Work out the difference in price between option A and option B.
Remember to check your working.

(5)

Use the box below to show clearly how you get your answer.

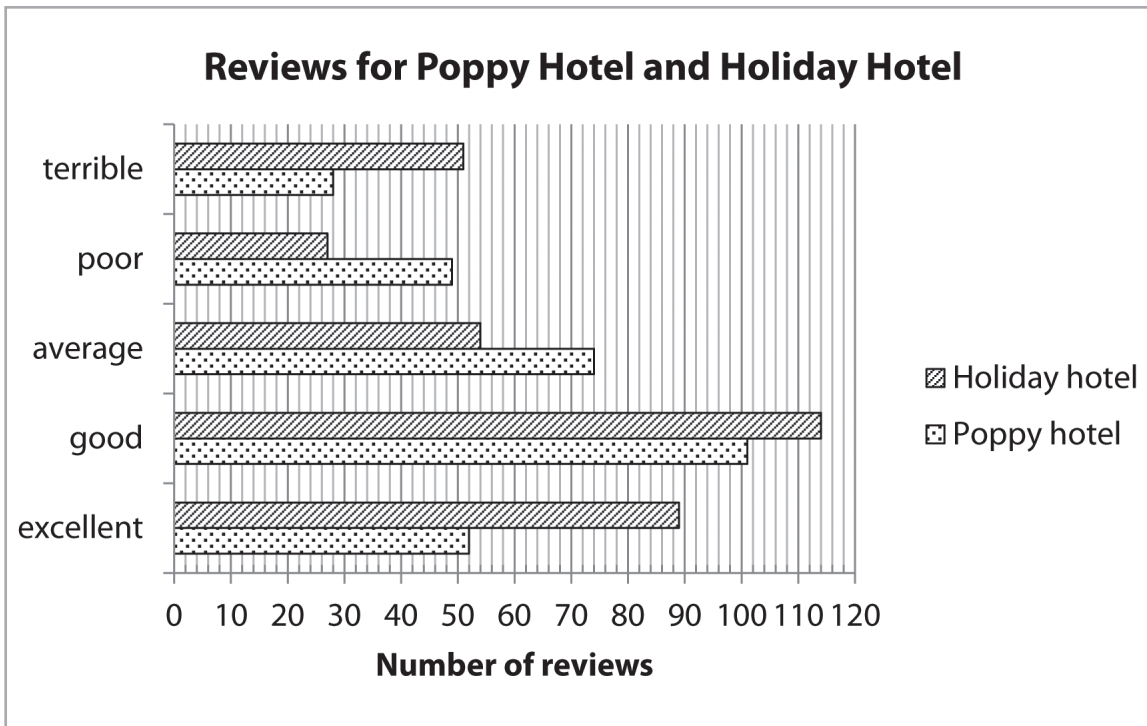


A large, empty rectangular box with rounded corners, intended for the student's answer to Question 2.

(Total for Question 2 is 5 marks)



- 3 Tim decides to book either the Poppy Hotel or the Holiday Hotel. He looks at the reviews for these hotels.



Tim wants to use the chart to decide which hotel to book.

(a) Write **two** different statements about the hotels from the chart.

(2)

Write your statements in the box below.



Tim also looks at restaurant reviews.

He finds these review scores for La Bella restaurant.

Score	5	5	4	5	3	5
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Tim is going to book La Bella restaurant if it has a mean average review score of 4.5 or higher.

- (b) Does La Bella restaurant have a mean average review score of 4.5 or higher?
Show why you think this. (3)

Use the box below to show clearly how you get your answer.



(Total for Question 3 is 5 marks)



Section B: Playgroup

Answer all questions in this section.

Write your answers in the spaces provided.

4 Amy runs a playgroup.

She knows there must be 1 adult for every 8 children.

On Monday morning 20 children go to the playgroup.

There are 3 adults at the playgroup on Monday morning.

(a) Are there enough adults for the 20 children?

(2)

Use the box below to show clearly how you get your answer.



A large empty rectangular box for writing the solution to the problem.



At least half of the adults at the playgroup must be qualified to work with children.

On Friday there are 3 qualified adults and 1 unqualified adult at the playgroup.

(b) Are there enough qualified adults at the playgroup on Friday?
Show why you think this.

(1)

Use the box below to show clearly how you get your answer.



A large empty rectangular box for writing the answer.

(Total for Question 4 is 3 marks)



- 5 Amy wants to buy some new toys for the playgroup. She makes a list of the toys she wants to buy.

Toy	Cost
Construction toy	£37
Building bricks	£54
Play mat	£43
Soft play tunnel	£90
Jigsaws	£32

Amy wants to buy as many different toys as possible. She has £130 to spend.

Which toys can Amy afford to buy?

(2)

Use the box below to show clearly how you get your answer.



(Total for Question 5 is 2 marks)



6 Kiri works at the playgroup every day from Monday to Friday.

The playgroup opens each morning at 09:30
It closes each day at 12:00

Kiri starts work 45 minutes before the playgroup opens.
She finishes work 1 hour 15 minutes after it closes.

Kiri thinks she works 23 hours from Monday to Friday.

(a) Is Kiri correct?
Show why you think this.

(4)

Use the box below to show clearly how you get your answer.



A large empty rectangular box for writing the answer.



On Tuesday there are 25 children at the playgroup.
They each have a drink in the morning.

Each child has 200 ml of drink.

(b) How many **litres** of drink should Kiri make for the 25 children?
Show a check for your answer.

(4)

Use the box below to show clearly how you get your answer and to show your check.



A large empty rectangular box provided for the student to show their work and calculations.



The children eat biscuits at playgroup.

Amy needs 25 biscuits each day.

She wants to buy enough packets of biscuits for 5 days.

There are 22 biscuits in a packet.

(c) How many packets of biscuits should Amy buy?

(3)

Use the box below to show clearly how you get your answer.



A large empty rectangular box for showing the solution to the problem.

(Total for Question 6 is 11 marks)



Section C: Indoor karting

Answer all questions in this section.

Write your answers in the spaces provided.

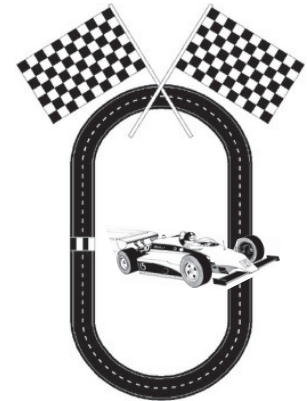
- 7 Kofi owns an indoor karting centre.
He wants to put a cafe in the karting centre.

He wants the cafe to be

- 5 m from the karting area
- 10 m or more away from the pit stop.

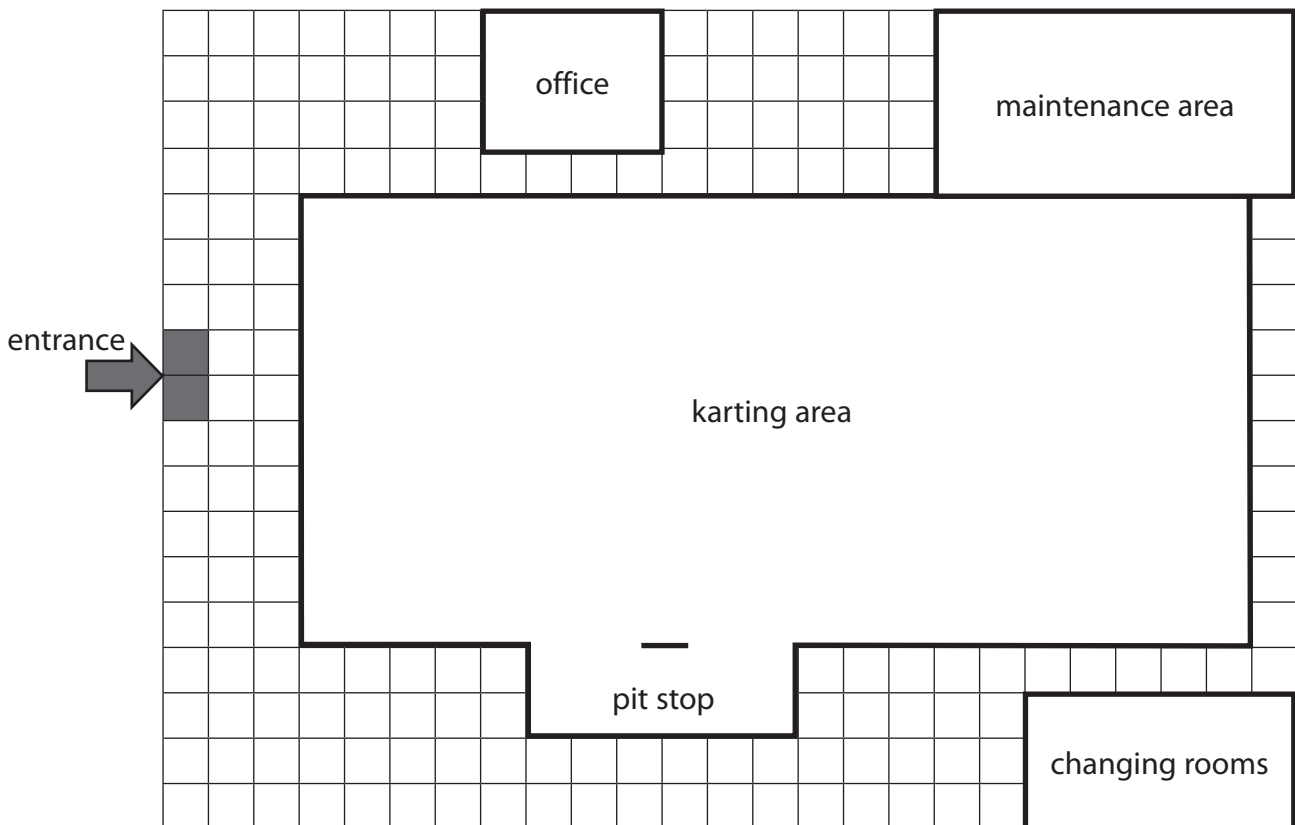
The cafe needs a rectangular space 15 m by 20 m.

Kofi draws a scale plan of the karting centre on a grid.



Draw the space for the cafe on the grid.

(3)



Key: 1 square on the grid is 5 m in the karting centre

(Total for Question 7 is 3 marks)



- 8** Kofi wants to put new barriers along part of the karting track.
He needs a total length of 45 m.

The length of each barrier is 1500 mm.

(a) How many barriers does Kofi need?

(3)

Use the box below to show clearly how you get your answer.



A large empty rectangular box for writing the solution to the problem.



Kofi also wants new barriers for the pit stop.
The pit stop is in the shape of a rectangle.

The diagram shows the barriers.

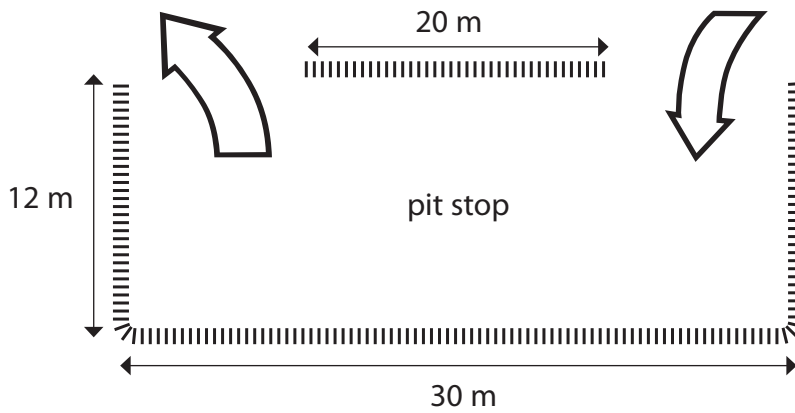


Diagram **NOT**
accurately drawn

Key:  barrier

Kofi thinks he needs barriers for a total length of 74 m.

(b) Is Kofi correct?
Show why you think this.

(3)

Use the box below to show clearly how you get your answer.



Blank area for showing the answer.

(Total for Question 8 is 6 marks)



- 9 Kofi sells photos to the visitors at the karting centre.
The cost price of each photo is £2

Kofi uses this rule to work out the selling price of each photo.



Kofi thinks the selling price should be £8

- (a) Is Kofi correct?
Show why you think this.

(3)

Use the box below to show clearly how you get your answer.



Large empty box for showing the answer.



Kofi writes down the winning lap times for the Cadet races this week.

Race number	Lap time (seconds)
1	45.25
2	46.15
3	45.95
4	45.05
5	45.5

Kofi wants to put the fastest winning lap time on his website.

(b) Which is the fastest winning lap time?

(1)

Write your answer in the box below.

Kofi wants to record information about the photos visitors buy.

The types of photo are

- A – finish line
- B – first corner
- C – back straight
- D – winner's podium

Kofi wants to record how many of each type of photo the visitors buy each hour from 2 pm to 5 pm on Saturday.

(c) Design a data collection sheet for Kofi to use.

(3)



Use the box below to show your data collection sheet.

(Total for Question 9 is 7 marks)

TOTAL FOR PAPER = 48 MARKS



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