Write your name here

Surname	Other names

**Pearson Edexcel
Functional Skills**

Centre Number

Candidate Number

Mathematics

Level 1

3–7 February 2014
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

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 ▶

PEARSON

SECTION A: Birthday party

Answer all questions in this section.

Write your answers in the spaces provided.

1 Bronwen plans a birthday party for her son.

She writes down how much she has spent so far.

Hire of room	£49.50
Children's entertainer	£30
Prizes	£15.75
Food	£22.89

(a) How much has Bronwen spent so far?
Show how you check your answer.

(3)

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

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

The party is going to start at 1.30 pm and finish at 4.30 pm.
Bronwen makes notes about what the children are going to do at the party.

start	1.30 pm
race	15 minutes
3 team games	20 minutes for each game
party tea	30 minutes
entertainer	45 minutes

Bronwen thinks they can do everything on her list by 4.30 pm.

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

(3)

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

(Total for Question 1 is 6 marks)

Turn over ▶

2   Bronwen wants to make a party bag for each child at the party.

Here are some items that can go in a party bag.

Toy mouse	49p
Chocolate	36p
Sherbet dip	33p
Mini bag of sweets	12p
Puzzle	20p
Whistle	25p

Bronwen wants to buy 3 different items for each party bag.

She wants all the party bags to have the same 3 items.

There are going to be 24 children at the party.

Bronwen has £20 to spend on items for the party bags.

Which items should Bronwen buy for the party bags?

(3)

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

(Total for Question 2 is 3 marks)

3 There is a field for the children to play on at the party.
Bronwen wants to put a rope around a section of the field.

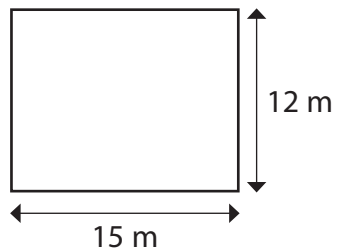The section is rectangular 15 m long and 12 m wide.

12 m

Diagram **NOT**
accurately drawn

15 m

(a) How much rope does Bronwen need?

(2)

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

Bronwen has prizes to give away for the race and teams games.

- The children who finish 1st, 2nd and 3rd in the race each get a prize.

- There are 3 team games.

- The 24 children make 4 equal teams for the games.

- After each team game every child in the winning team gets a prize.

Bronwen has a total of 20 prizes for the race and the 3 team games.

(b) Does Bronwen have enough prizes?

(3)

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

Bronwen makes muffins for the party.

She has a recipe for 12 muffins.
It uses 210 g of flour.

Bronwen wants to make 24 muffins.

(c) How much flour does Bronwen need for 24 muffins?

(2)

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

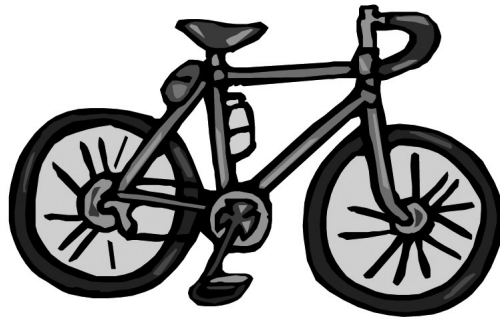**(Total for Question 3 is 7 marks)**

Turn over ▶

SECTION B : Cycling

Answer all questions in this section.

Write your answers in the spaces provided.

4 Omar wants to buy a new bike.

He sees this offer.

Was
£600
Now 25%
off

(a) How much money does Omar save if he buys this bike?

(2)

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

Omar is going on a cycling trip.

He works out that he needs a total of 8 litres of energy drink on the trip.

> Energy drink powder
>
> 1 packet makes
> 250 ml of energy drink.

Omar has 35 packets of energy drink powder.

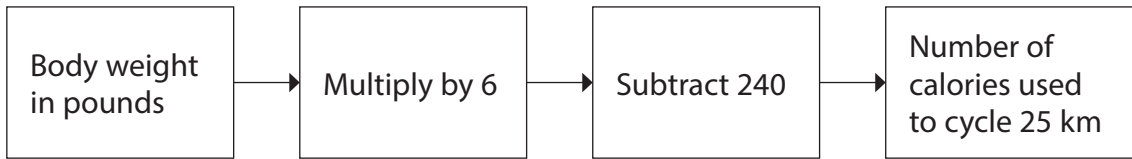(b) Are 35 packets enough to make 8 litres of energy drink?

(3)

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

Omar has this rule to work out how many calories he uses when cycling.

Body weight in pounds	→	Multiply by 6	→	Subtract 240	→	Number of calories used to cycle 25 km

Omar has a body weight of 196 pounds.

He thinks he uses 900 calories when cycling 25 km.

(c) Is Omar correct?

(3)

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

(Total for Question 4 is 8 marks)

5 Jill plans a holiday in France.

The diagram shows the distances between some towns in France.
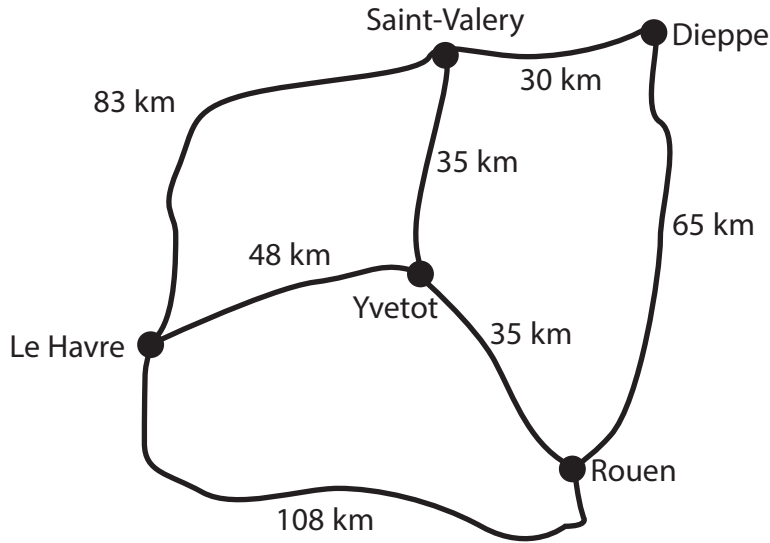Jill wants to find a route from Dieppe to Le Havre.

Diagram **NOT** accurately drawn

Jill wants to find a route with a total distance between 175 km and 225 km.

> (a) Find a route for Jill.
> Show that your route is between 175 km and 225 km.
>
> **(3)**

Use the box below to show clearly how you get your answer.
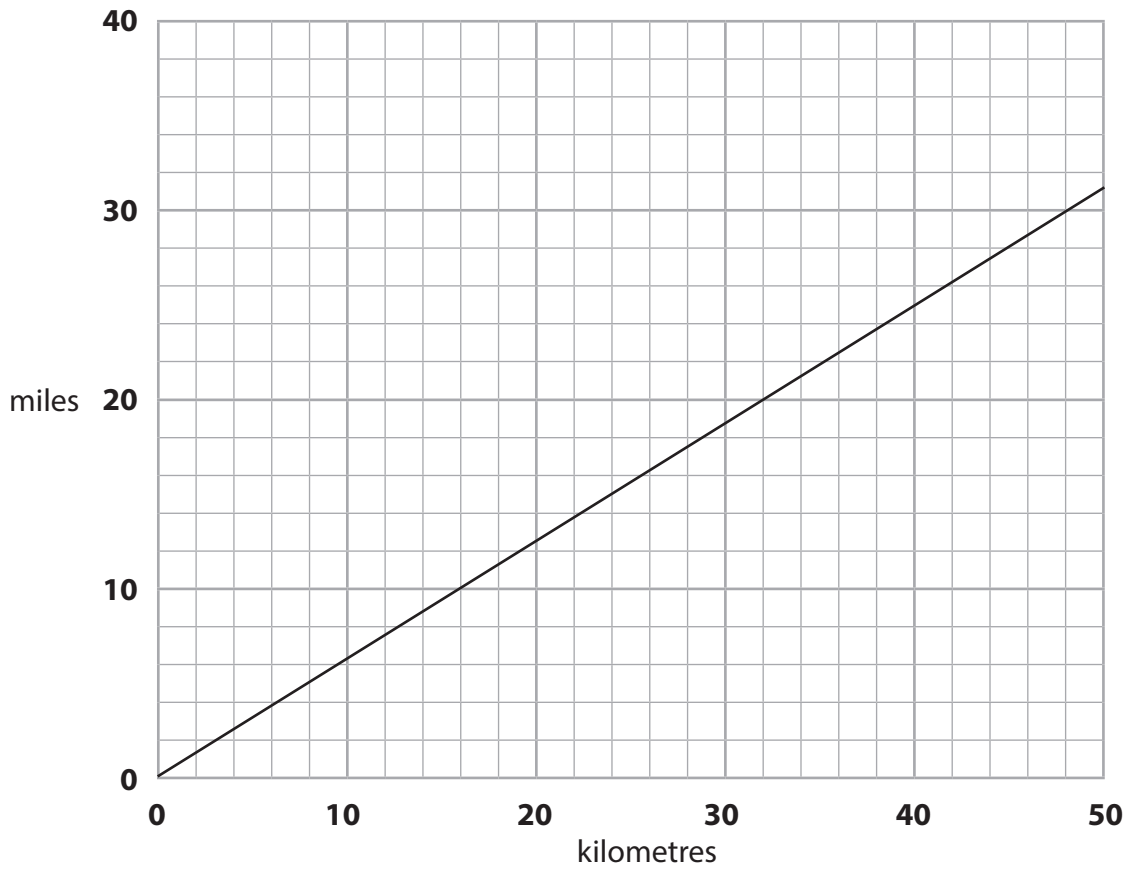
Jill plans to go cycling in France.
She normally cycles 10 miles in a day in the UK.

Jill wants to go on a 48 kilometre bike ride in France.
She wants to know how much further this is than the distance she cycles in a day in the UK.

Jill finds this graph to help her convert between kilometres and miles.

(b) How much further is 48 kilometres than 10 miles?

(2)

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

Jill writes down how many kilometres she actually cycles each day in France.

Day	Sat	Sun	Mon	Tues	Wed	Thu
km	48	14	16	10	18	32

Jill works out that the mean distance she cycled in a day is 25 km.

(c) Is Jill correct?
Show why you think this. **(3)**

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

(Total for Question 5 is 8 marks)

Turn over ▶

SECTION C: The book shop

Answer all questions in this section.

Write your answers in the spaces provided.

6 David owns a book shop.

The shop opens at 9.00 am from Monday to Saturday.

It is closed from 5.30 pm on week days and 4.30 pm on Saturdays.

(a) How many hours is the shop open for each week?

(3)

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

A customer wants to buy a book from the book shop on Sunday.

(b) How likely is it that the customer finds the shop is open on Sunday?

(1)

Tick (✓) the correct answer below.

Impossible

Unlikely

Equal chance

Likely

Certain

(Total for Question 6 is 4 marks)

P 4 5 0 2 3 A 0 1 5 2 0

7 Kat is a decorator.

David wants to hire Kat to paint a room at the shop.

Kat charges £170 for each full day she works.
She charges half as much for working half a day.

Kat says she will need $2\frac{1}{2}$ days to paint the room.

The paint is going to cost £72

David wants to pay less than £500 for the painting.

(a) Is Kat going to charge less than £500 for painting the room?

(3)

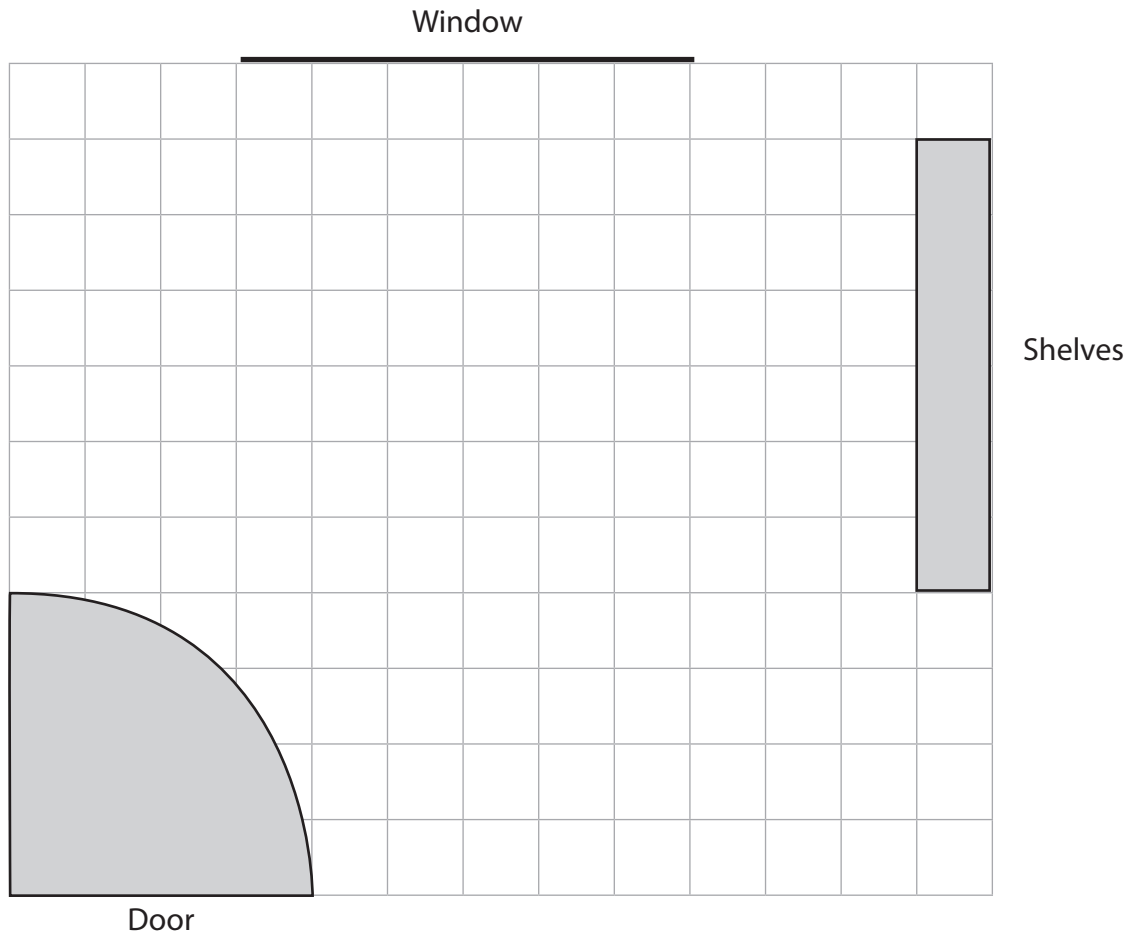Use the box below to show clearly how you get your answer.

David wants to put a book case and a table in the room.

The book case needs a rectangular floor space 150 cm long and 50 cm wide. It must

* be in a corner of the room
* not be under the window.

The table needs a square floor space with sides 125 cm.

David draws a plan of the room on a grid.

Window

Shelves

Door

Key: 1 square on the grid is 25 cm by 25 cm in the room

(b) Draw the spaces for the book case and the table on the plan.
Remember to use the key.

(3)

(Total for Question 7 is 6 marks)

8   Mrs Jones wants to buy two books.

One book has a full price of £12.30

The second book has a full price of £6.50

Mrs Jones sees these offers.

David's Book shop

Buy any 2 books
and the cheapest book
is half price

Books.com

Discount 20% on all
books

She wants to buy the books where she makes the biggest saving.

Where should Mrs Jones buy the two books?

(6)

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

(Total for Question 8 is 6 marks)

TOTAL FOR PAPER IS 48 MARKS

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