

Write your name here

Surname

Other names

**Pearson Edexcel
Functional Skills**

Centre Number

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Candidate Number

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Mathematics

Level 1



16–20 March 2015

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 ►

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P 4 3 6 6 8 A 0 1 2 0

PEARSON

SECTION A: Supermarket job

Answer all questions in this section.

Write your answers in the spaces provided.

1 Clare works in a supermarket.

She earns £304.50 for a 42 hour week.

Clare sees this advert for another job in the local paper.

Fresco supermarket
Night shift staff needed

£7.98 per hour
42 hours per week

Clare thinks she can earn more at Fresco supermarket.

(a) Is Clare correct?

Show why you think this.

You must show how you check your answer.

(3)

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



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Show how you check your answer in the box below.



Clare finds out some more details about the job at Fresco.

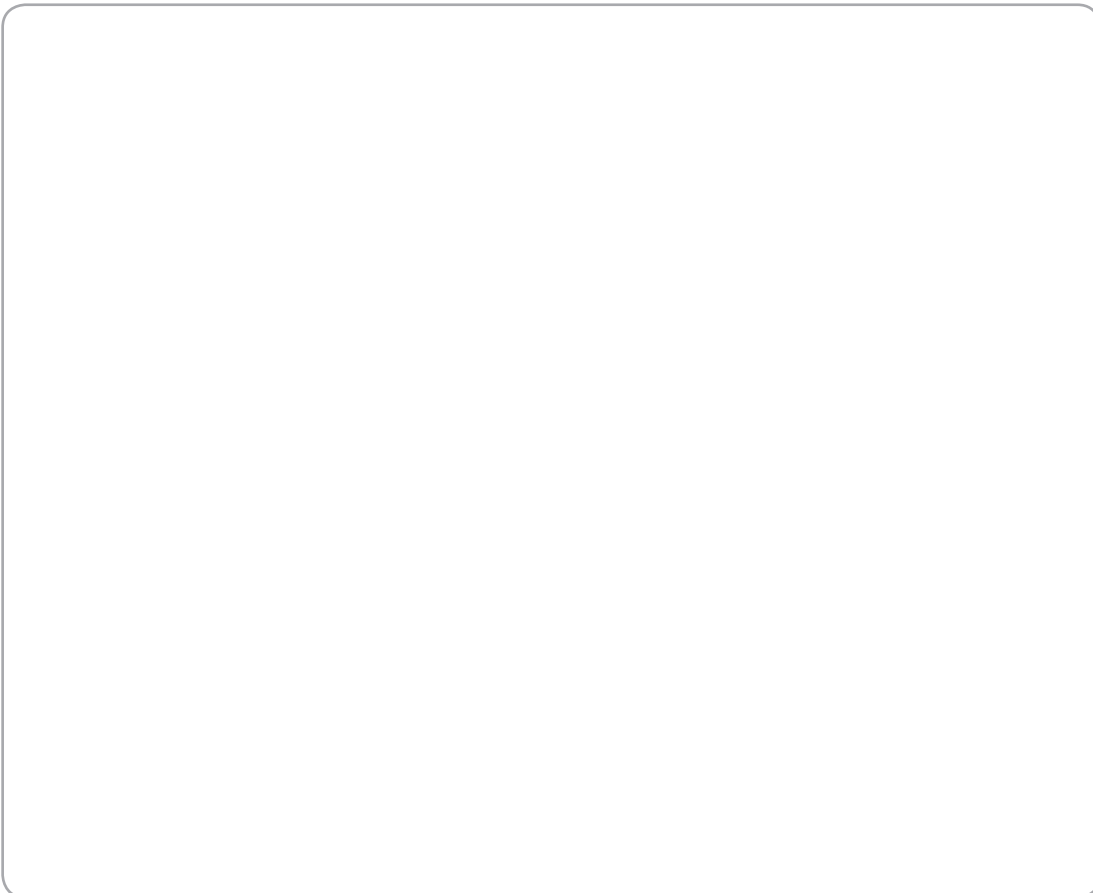
Night staff have to work 1 Saturday every 4 weeks.

Clare thinks that means she would have to work 13 Saturdays in one year.

(b) Would Clare have to work 13 Saturdays in one year?

(2)

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



(Total for Question 1 is 5 marks)



2 Clare has to go for an interview at the Fresco head office in Birmingham.

She needs to get a bus from East Way to Stafford.
She then needs to get a train from Stafford to Birmingham.

Clare knows

- the interview is at 11:15 am
- it takes 20 minutes to walk from the station in Birmingham to the Fresco head office
- she needs to get the bus at East Way.

The timetables below show some information about bus and train times.

Bus stop	Bus number				
	2C	2C	2	2	2C
Barnet Road	09:05	09:20	9:35	09:52	10:05
East Way	09:15	09:30	9:45	10:02	10:15
Castle	09:25	09:40	-	-	10:25
Stafford Station	09:45	10:00	9:55	10:12	10:45

Train times: From Stafford Station to Birmingham Station	
Depart	Arrive
09:25	09:58
10:03	10:27
10:10	10:47
10:25	10:58
10:43	11:17
11:02	11:32

Clare wants a time plan to help her get to the interview.

The time plan must show the time the bus leaves East Way and gets to Stafford.
It must also show the time the train leaves Stafford and gets to Birmingham.

Make a time plan for Clare.

(4)

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Write your time plan in the box below.

(Total for Question 2 is 4 marks)

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- 3 Clare gets the job at Fresco supermarket.
The manager at her current job does not want her to leave.
The manager says

Keep working here and I'll pay you an extra 10% each week.

Clare currently earns £305 each week.

(a) What is 10% of £305?

(2)

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



Blank area for showing the calculation.

Clare wants to check how much it will cost to get to work at Fresco supermarket.

It is a night shift job so she will have to travel to and from work 4 times a week.

Clare makes these notes about travel costs.

Bus to Fresco

Single journey £2.20

Daily bus pass £4

Weekly bus pass £19

By Car

It costs 39p a mile to run my car

Fresco is 6 miles from home.

(b) What is the cheapest way for Clare to travel to work at Fresco each week?

(5)

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(Total for Question 3 is 7 marks)

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SECTION B: Music competition

Answer all questions in this section.

Write your answers in the spaces provided.

- 4 Isha organises a music competition in the local community centre.

She needs to collect information from the entry forms.

She wants to know how many people have entered for

- singing
- piano
- guitar
- any other instrument.

Isha also wants to put them in these age groups:

under 14 years, 14 to 18 years, over 18 years.

Isha needs a data collection sheet.

Design a data collection sheet for Isha.

(3)

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Use the box below to show your data collection sheet.



(Total for Question 4 is 3 marks)

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5 Here is the poster for the music competition.



Isha needs to hire the hall.

She also needs

- 1 hour before the competition to prepare the hall
- 1 hour after the competition to tidy up.

Here are the costs to hire the hall at Longley Community Centre.

Main hall	
Weekdays/Sundays	£15.00 per hour
Saturdays	£18.00 per hour or £150 for 7 am – 6 pm

Isha needs to pay for the hall.

She also needs £40 to buy refreshments.

Isha thinks that 65 people will pay to watch the competition.

She is going to charge them £2.75 each.

Will Isha have enough money to pay for the hall and the refreshments?

(6)

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(Total for Question 5 is 6 marks)

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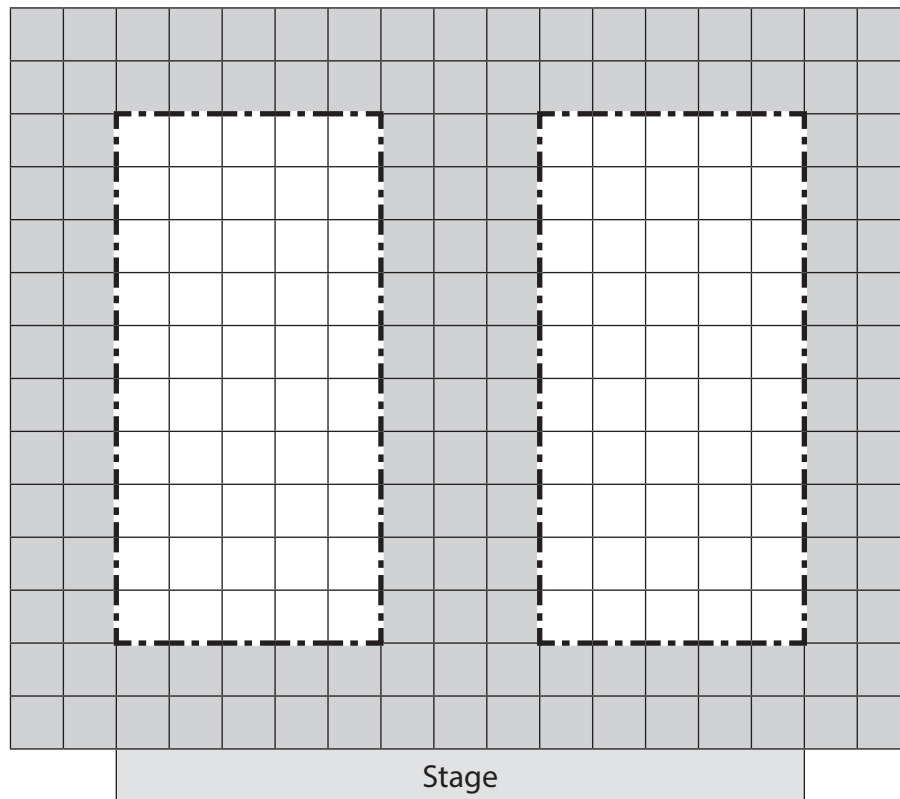
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6 Here is a plan of the hall.



Key: 1 square on the plan is 1 m by 1 m in the hall

 seating area

Isha needs to put as many chairs as possible in the seating areas.

Each chair needs 1 m^2 of space.

This allows for space around the chairs.

(a) How many chairs can Isha put in the seating areas?

(2)

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



Empty box for showing the solution.

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Isha finds out that 3 wheelchair users are coming to the competition.
She has to take out some chairs to fit the wheelchairs in the seating area.

The wheelchairs must be at the end of the rows.
A wheelchair needs a 2 m by 2 m space.

(b) Show where Isha can put the wheelchairs.

(2)

Shade the spaces for the 3 wheelchairs on the plan opposite.

Isha thinks that a maximum of 90 people (including the wheelchair users) can be seated in the hall.

(c) Is Isha correct?

(3)

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



Large empty box for showing the answer.

(Total for Question 6 is 7 marks)



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SECTION C: The care home

Answer all questions in this section.

Write your answers in the spaces provided.

- 7 Ted works as an apprentice in a care home.
He has a project to encourage the residents to drink enough fluids.
Ted buys some juice to make drinks for the residents.
He finds this offer.

High Juice Tropical
5 litre bottle
£6.50

Special offer
Buy 1 get another for $\frac{1}{2}$ price

Ted buys 10 litres of High Juice Tropical.

(a) What is the cost of 10 litres of juice?

(3)

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



Large empty box for showing the calculation.

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Ted mixes the juice with water to make drinks for the residents.

He uses the information on the label to make a full jug of the drink.

High Juice Tropical
Use 1 part juice to 4 parts water

When the jug is full it holds 2000 ml.

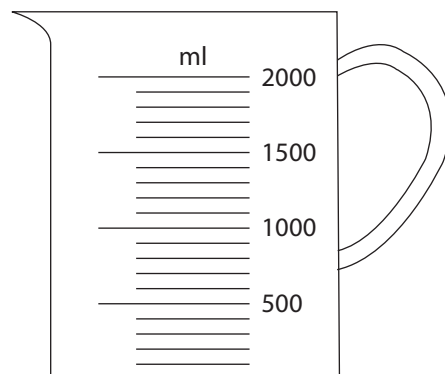
Ted puts the juice in first and then adds the water.

(b) How much juice should Ted put in the jug?
Show the amount on the jug below.

(4)

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

Put a line on the diagram to show how much juice Ted should put in the jug.



(Total for Question 7 is 7 marks)



- 8 Ted works on his project.
He reads a report that says

For older adults the daily intake of fluids should be more than 1.6 litres.

Ted says

That's the same as 1600 ml.

Ted is correct.

(a) Show that 1.6 litres is the same as 1600 ml. (1)

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



Empty box for showing the solution to part (a).

The home serves all drinks in 200 ml cups.

Pat is a resident at the care home.

Ted keeps a tally chart to record how many cups of fluid Pat drinks in a week.

Day	Tally	Number of 200 ml cups per day
Monday		6
Tuesday		9
Wednesday		8
Thursday		8
Friday		9
Saturday		7
Sunday		4

Ted thinks the mean average daily intake of fluid for Pat is less than 1.6 litres.

(b) Is Ted correct?
Show why you think this. (5)

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(Total for Question 8 is 6 marks)

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9 Ted has to give a talk to the staff at the care home about his project.

He works out the average number of cups each day for these residents.

Resident	Average number of cups per day
Edward	6.2
Mary	9.1
John	5.0
Eileen	8.5
Robina	4.8

Ted wants to show a graph or chart of this information in his talk.

Draw a graph or chart for Ted.

(3)

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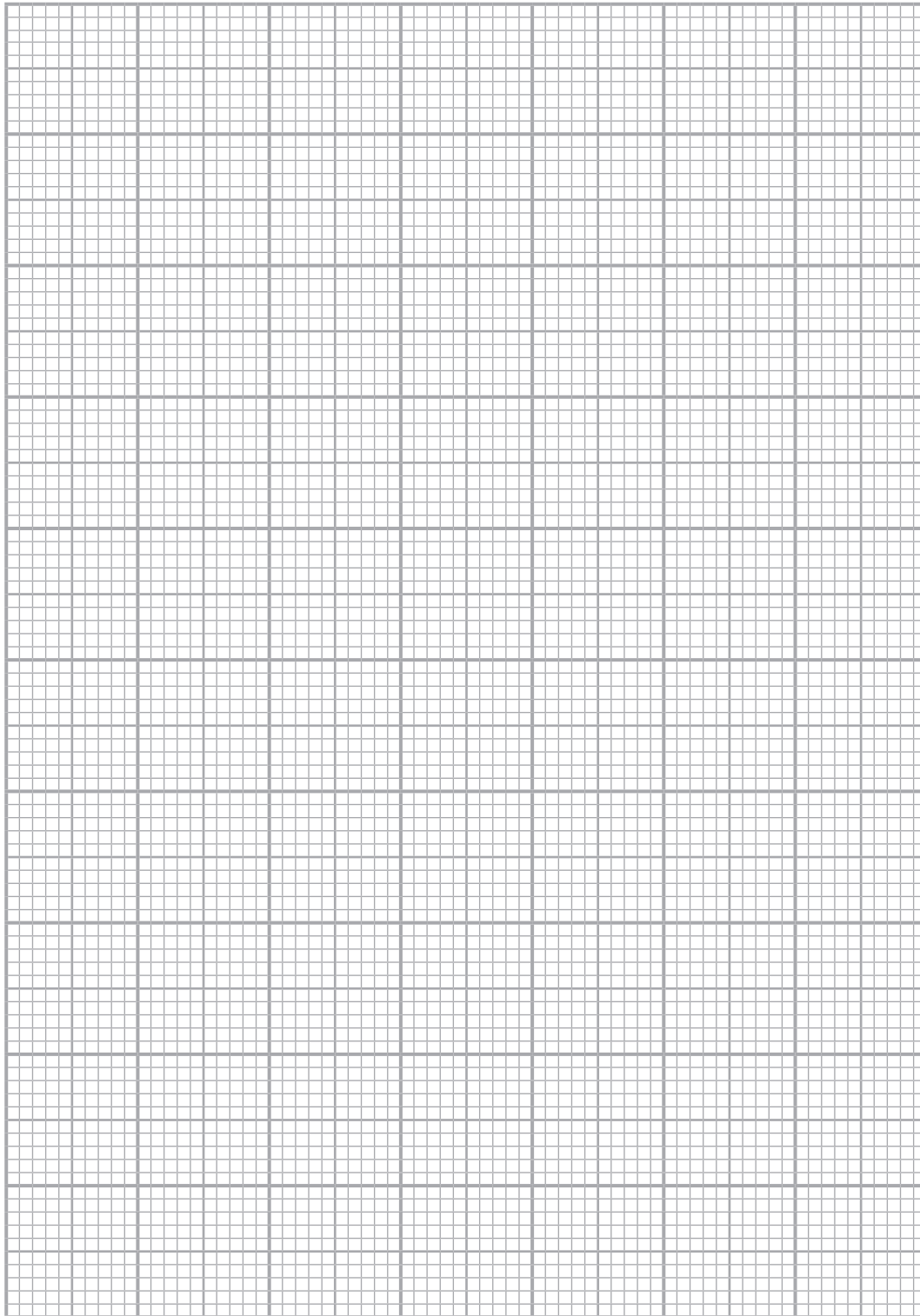
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(Total for Question 9 is 3 marks)

TOTAL FOR PAPER IS 48 MARKS



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