

Write your name here

Surname

Other names

**Pearson Edexcel  
Functional Skills**

Centre Number

--	--	--	--	--

Candidate Number

--	--	--	--

# Mathematics

**Level 1**



18 – 22 July 2016

**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 a **black** 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.*
- **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.**
- **This sign shows where marks will be awarded for showing your check.**



## Advice

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

Turn over ►

P49937A

©2016 Pearson Education Ltd.

1/1/1



**PEARSON**

**SECTION A: Home safety**

**Answer all questions in this section.**

**Write your answers in the spaces provided.**

- 1 Lisa wants to make her home safer.  
She finds a first aid kit for £17.74

Lisa thinks it may be cheaper to make a kit up herself.  
She finds these prices of items to go in a kit.

**Kit items**

Plastic box	£5.94
Plasters	£2.29
Bandages	£7.95
Gloves	80p
Wipes	55p

(a) How much money will Lisa save if she makes the first aid kit?

(3)

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

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Lisa and her husband want to do a first aid course.  
She finds a course at the local college.

**First Aid Course**  
Normal price £129.99  
Buy now get a third off

Lisa wants to buy 2 places on the course.

(b) How much money will Lisa save if she buys 2 places now?  
Show a check of your working. (4)

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

Use the box below to show your check.



(Total for Question 1 is 7 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



- 2 Lisa wants to repair the garden fence on a day with no rain. She looks at the dial on her home weather station on Tuesday.



What is the likelihood of rain on Tuesday?

(1)

Tick (✓) the correct answer.

impossible ( ) very unlikely ( ) unlikely ( ) even chance ( ) likely ( )

(Total for Question 2 is 1 mark)

- 3 Lisa wants to put a safety gate in a gap between two walls. She knows the gap is 132 cm wide.

Lisa finds a safety gate that can fit a gap up to 97 cm wide.



A maximum of two extensions can be added to each side of this gate to make it wider.

Lisa finds these prices.

safety gate	£15.00
7 cm extension	£8.99
14 cm extension	£14.99
28 cm extension	£15.99

Lisa wants to know the cheapest price for this safety gate and the extensions to fit the 132 cm gap.

(a) Work out the cheapest price for Lisa.

(5)



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



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Lisa needs to fit a fire blanket holder to a wall.  
There are two holes on the back of the holder.  
Lisa needs a guide to help drill holes into the wall.

She begins to draw an accurate guide on paper to show her where to drill the holes.

Lisa knows

- the first hole is 5 cm from the top and is equal distance from the sides
- the second hole is 3 cm from the bottom and is equal distance from the sides.

(b) Mark the two holes on the guide for Lisa with crosses.

(3)

Use the accurate guide opposite to mark the holes.

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



top



Accurate drawing of guide

1 cm is equal to 1 cm

side

side

bottom

(Total for Question 3 is 8 marks)



P 4 9 9 3 7 A 0 7 2 0

**SECTION B: Gardening business**

**Answer all questions in this section.**

**Write your answers in the spaces provided.**

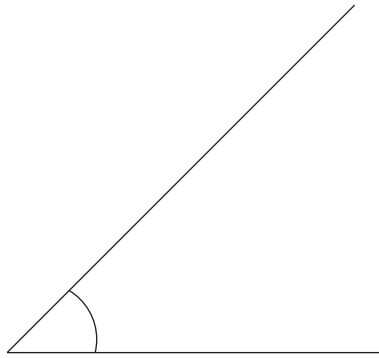
**4** Ian runs a gardening business.

He finds the heights of trees using angles and distances.

(a) Measure the angle for Ian.

(1)

Write the size of the angle on the line below.



.....

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

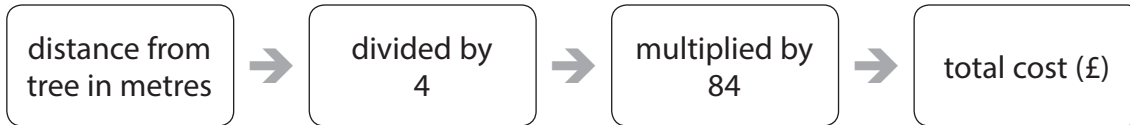
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA





Ian visits a customer to give them a quote to cut down a tree.  
He uses this rule to give quotes.



He finds the distance from the tree is 12 metres.

The customer will give Ian the job if the total cost is less than £240

(b) Will the customer give Ian the job?  
Show a check of your working.

(4)

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

Use the box below to show your check.



(Total for Question 4 is 5 marks)

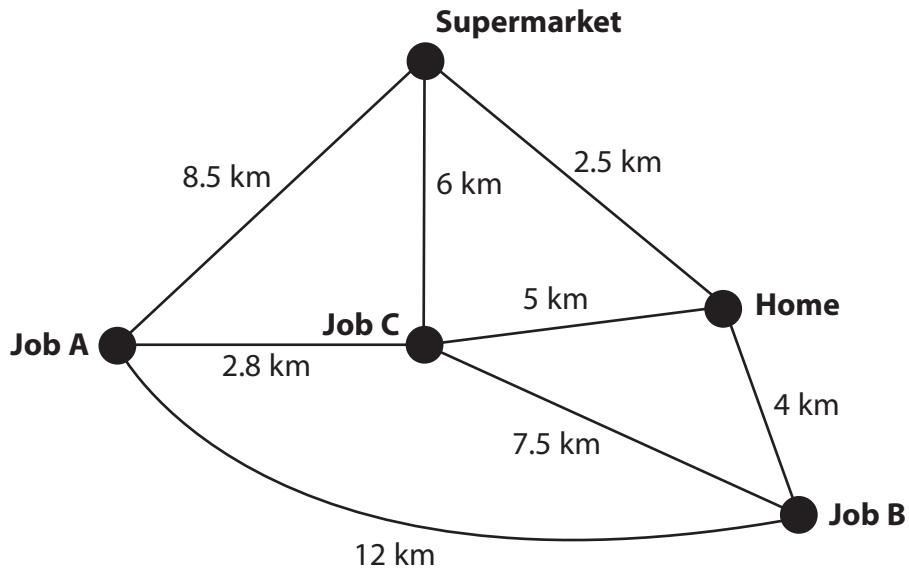


P 4 9 9 3 7 A 0 9 2 0

5 Ian has 3 jobs to do on Saturday and needs to go to the supermarket. He will start and finish at home.

Ian wants to plan the shortest route for Saturday.

He draws this sketch.



(a) Find the shortest route for Ian.

(3)

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

Empty box for showing the solution.

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Ian wants a loan.

He uses this information to tell the bank manager about his earnings.

Monthly earnings					
Sept	Oct	Nov	Dec	Jan	Feb
£5 800	£3 600	£4 200	£1 500	£2 000	£2 800

Ian needs to tell the bank manager the range of his earnings and his average monthly earnings.

(b) Calculate the range and average monthly earnings for Ian.

(4)

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

(Total for Question 5 is 7 marks)



- 6 Ian has some jobs to do on Monday.  
He writes a list of these jobs and the time needed.

**Monday**

Start work at 9 am

Travel to Mill Lane  $\frac{3}{4}$  hour

Cut down tree 90 minutes

Travel to Walker Ave 50 mins

Lunch 30 minutes

Repair fence 3 hours 20 mins

Travel home from Walker Ave 1 hour

Ian thinks he will be home at 4.15 pm.

Is Ian correct?  
Show why you think this.

(4)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



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



(Total for Question 6 is 4 marks)



**SECTION C: Car boot sale**

**Answer all questions in this section.**

**Write your answers in the spaces provided.**

- 7 Nav is planning a car boot sale for charity.

A farmer will let Nav use one of his fields.  
The farmer says

The top field is a rectangle 60 m by 30 m.

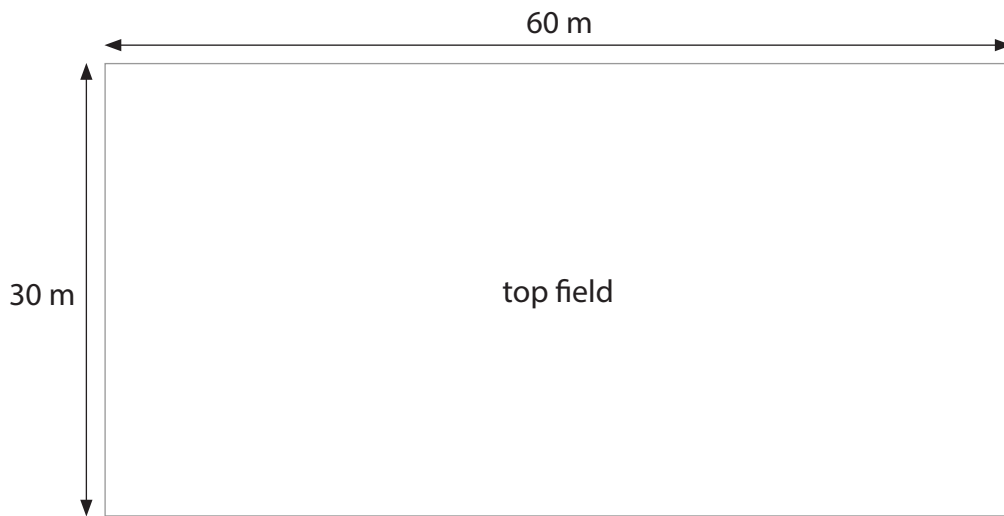


Diagram **not**  
accurately drawn

Each car at the car boot sale will have a space that is a rectangle 3 m by 6 m.

The 3 m by 6 m space allows the cars to safely park and the people to move around.

Nav will charge each car driver £20 for a space at the car boot sale.

He wants to know the amount of money he can get from selling all the spaces at the car boot sale.

(a) How much money can Nav get from selling all the spaces?

(5)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



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



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Nav decides to hold one car boot sale each week in June.  
There are 4 weeks in June.

Nav has these notes about the bookings for June.

Mrs Khan  
Tel 283658  
Weeks 1, 2 & 3

Mr Parker  
Tel 284448  
All weeks

Mrs Ling  
Tel 712324  
Week 2

Mrs Finney  
Tel 289531  
Weeks 1, 2, 3 & 4

Mrs Wright  
Tel 756521  
Weeks 1 & 3

Nav needs one table to show which week each person has booked and their telephone number (Tel).

(b) Design a table and complete it for Nav.

(4)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA





Draw and complete your table in the box below.



(Total for Question 7 is 9 marks)



8 Mrs Finney and her son take £120 from their car boot stall.

They decide to share the money so that for every £1 Mrs Finney gets her son gets £2

Mrs Finney thinks she should get £50

(a) Is Mrs Finney correct?  
Show why you think this. (3)

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

Outside the entrance to the car boot sale there is a burger van.

The owners of the burger van agree to give 20% of their takings to the charity.

Their takings are £1250

(b) What is 20% of £1250?  
Show a check of your answer. (3)

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

Show your check in the box below.



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

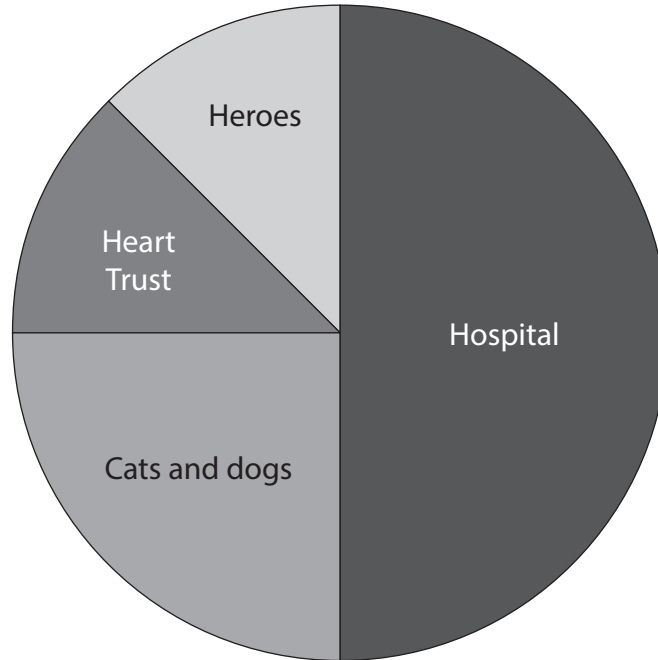
DO NOT WRITE IN THIS AREA



Nav draws a pie chart after the car boot sales.

The pie chart shows where the money from the car boot sales is going.

**Charities – where the money is going**



Nav wants to write a comment about which charities the money is going to.

(c) Use the information from the pie chart to write a comment for Nav.

(1)

Write your comment in the box below.

**(Total for Question 8 is 7 marks)**

**TOTAL FOR PAPER IS 48 MARKS**



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

**BLANK PAGE**

