

Write your name here

Surname

Other names

**Pearson Edexcel  
Functional Skills**

Centre Number

--	--	--	--	--

Candidate Number

--	--	--	--

# Mathematics

Level 1



6–10 October 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 ►

P43648A

©2014 Pearson Education Ltd.

1/1/1/1



**PEARSON**

**SECTION A: College**

**Answer all questions in this section.**

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

- 1 Anna goes to college in Lewes.  
She travels by train from Polegate.

On Tuesday Anna needs to arrive at college between 8 am and 8:20 am.

Train timetable					
<b>Polegate</b>	07:23	07:39	07:54	08:05	08:12
<b>Berwick</b>	07:29	07:44	-	08:11	08:18
<b>Glynde</b>	07:35	-	-	08:16	08:23
<b>Lewes</b>	07:41	07:53	08:07	08:22	08:29

Anna starts a time plan.  
She knows it takes 8 minutes to walk to college from Lewes station.

(a) Plan the journey for Anna. (3)

Complete the time plan in the box below.

Train leaves Polegate at .....

Train arrives at Lewes at .....

Arrive at college at .....

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Anna knows it takes her 20 minutes to walk to Polegate station.  
It takes 8 minutes to walk to college from Lewes station.

Anna uses the time plan to work out the total time for her journey.

(b) What is the total time for the journey to college?

(2)

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



Large empty box for showing the working out of the answer.

(Total for Question 1 is 5 marks)



2 There is a fashion show at the college.  
Anna plans the stage for the show in the college hall.  
The hall floor is rectangular 15 m by 12 m.

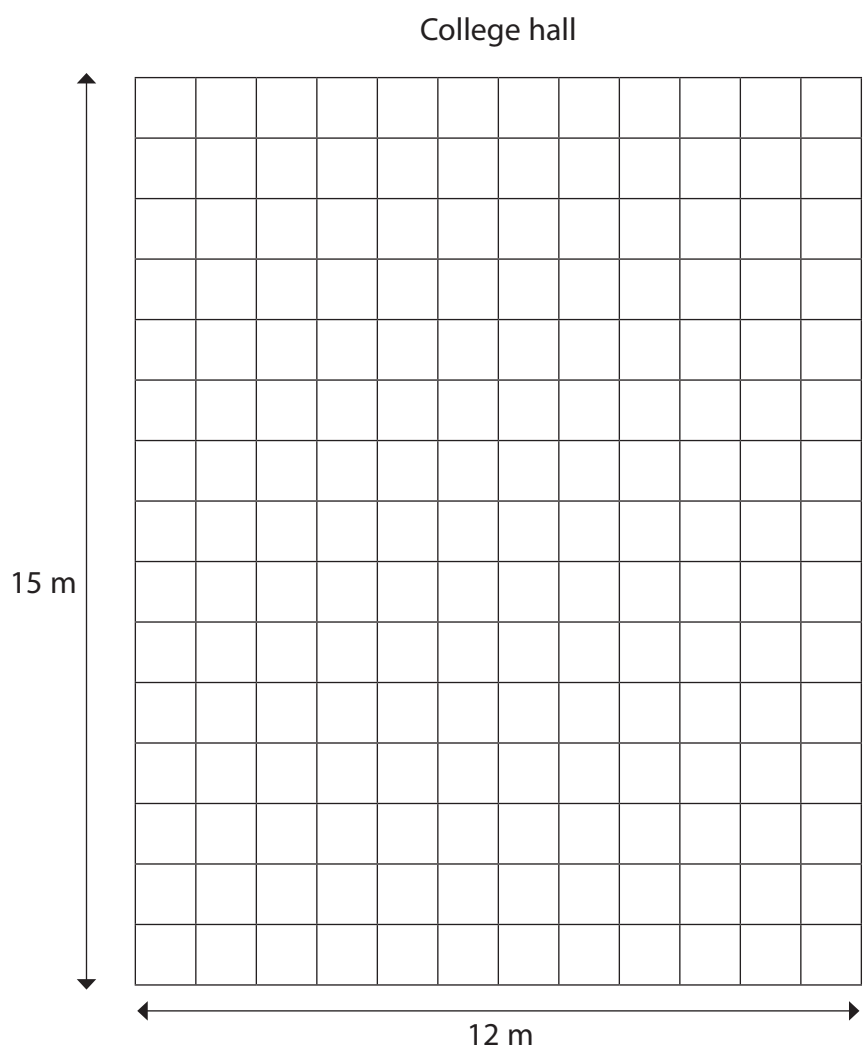
The stage will be made of 8 blocks.  
The base of each block is rectangular 2 m by 1 m.

The stage can be a rectangle shape or a 'T' shape.  
The hall blocks must not be put on top of each other.

Anna has a plan of the hall.

Design the stage for Anna. (2)

Use the plan below to show how the 8 blocks make the stage.



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

(Total for Question 2 is 2 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

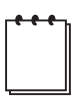
DO NOT WRITE IN THIS AREA

3 Anna organises ticket sales for the fashion show.  
The tickets cost £5.00 for adults and £4.50 for students.

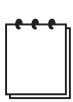
Anna knows that 40 students have bought tickets.  
She thinks that if she also sells 16 adult tickets she will make more than £250

(a) Is Anna correct?  
Show why you think this.  
You must show a check of your working. (5)

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



Use the box below to show your check.



P 4 3 6 4 8 A 0 5 2 0

Anna plans refreshments for 56 people at the fashion show.  
She has a budget of £100

These are the prices for refreshments at the college.

tea	£1.10 each person
biscuits	£0.55 each person
fruit juice	£3.25 (for 8 people)
crisps	£0.70 each person
olives	£0.85 each person

Anna chooses fruit juice, crisps and olives.

(b) Is £100 enough to pay for these refreshments for 56 people?

(4)



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



A large, empty rectangular box with rounded corners, intended for the student to show their working out.

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

**(Total for Question 3 is 9 marks)**



## SECTION B: Youth club outing

Answer all questions in this section.

Write your answers in the spaces provided.

- 4 Rob organises an outing for the youth club.  
The only places the youth club can visit are:

a theme park, an animal park, an activity centre or a karting centre.

(a) How likely is it that the youth club goes to a museum?

(1)

Tick the correct answer in the box below.

certain

likely

even chance

unlikely

impossible

Rob wants to find out which place most people in the youth club choose.

He knows

- the outing can be in June, July or August
- the places to visit are a theme park, an animal park, an activity centre or a karting centre.

Rob is going to collect data from each person on which month they can go and the place they want to visit.

He wants to put all the data on one sheet.

(b) Design a sheet for Rob to use.

(3)

DO NOT WRITE IN THIS AREA

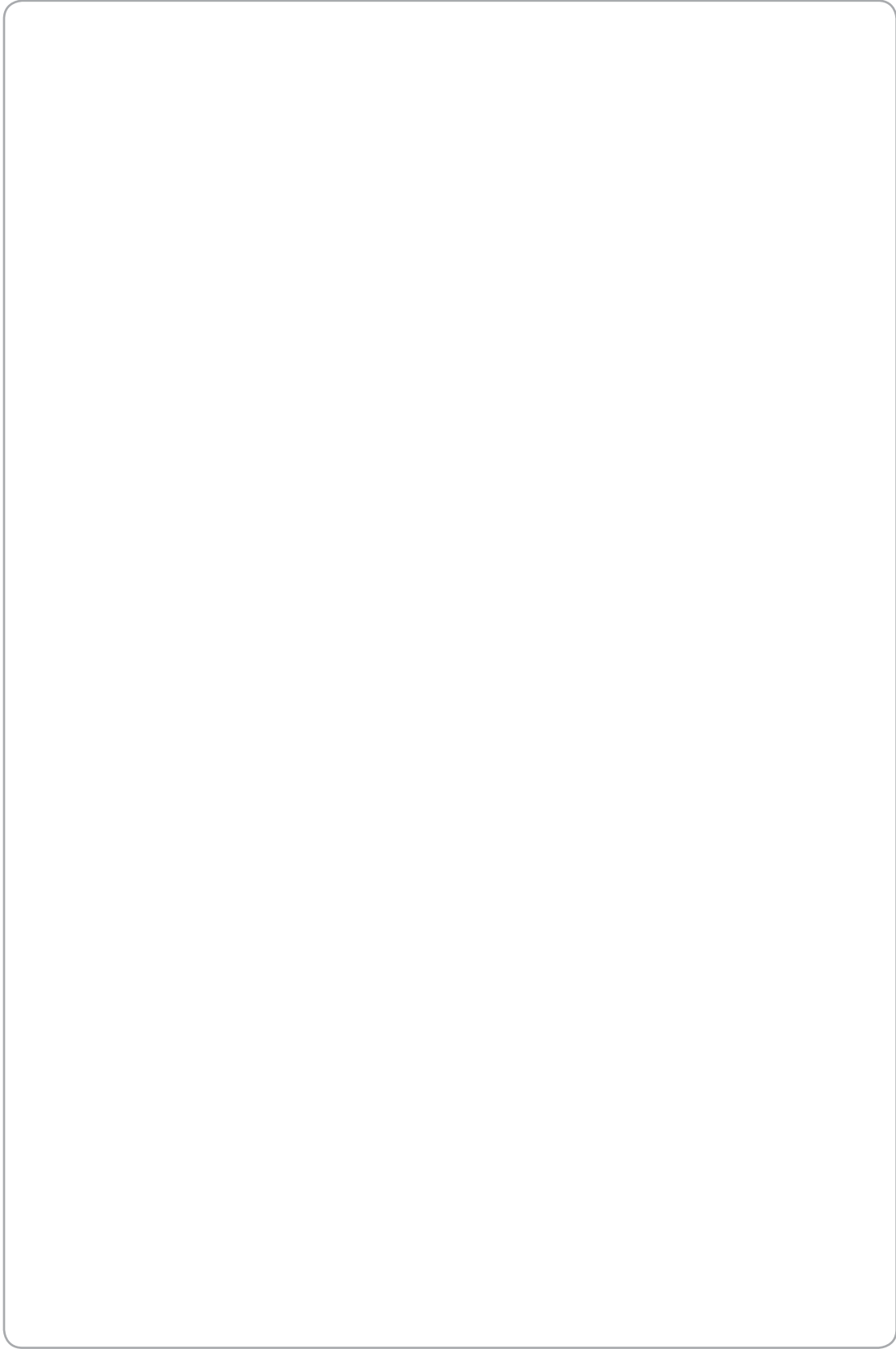
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA





Use the box below to show your data collection sheet.



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

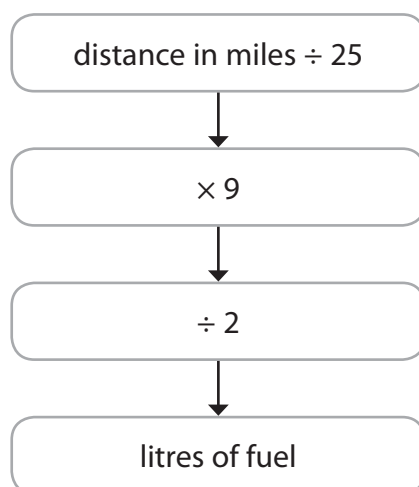
DO NOT WRITE IN THIS AREA

**(Total for Question 4 is 4 marks)**



- 5 The people at the youth club choose to go to an activity centre.  
They are going to travel by minibus.

Rob needs to work out the number of litres of fuel the minibus will use.  
He uses this rule.



The total distance is 85 miles.

(a) How many litres of fuel will the minibus use?

(3)

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



Rob needs to work out how much to charge for the outing.

- There will be 17 people in the minibus.
- The minibus costs £175 to hire.
- Rob allows £22 for fuel.

Rob thinks he should charge each person in the minibus £12 to cover these costs.

(b) Is Rob correct?

Show why you think this.

(3)

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



(Total for Question 5 is 6 marks)



6 The people at the youth club have saved money for the outing.

<b>Activity centre</b>	
<b>Ticket type</b>	<b>Price</b>
Adult aged over 16	£5.50
Children aged 16 and under	£4.50
Saver ticket	
2 adults and 2 children	£16

There are 17 people going on the outing.

Rob knows

- 4 people are adults
- all the other people are children.

Rob wants to work out the cheapest way to buy the tickets.

(a) Which tickets should Rob buy?

You must show that you have found the cheapest total cost.

(4)

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



For some activities at the centre you must weigh more than 7 stone and be over 10 years old.

Lynn is the youngest person at the youth club.  
She is 11 years old and weighs 108 pounds.

Use 1 stone = 14 pounds

(b) Does Lynn weigh more than 7 stone?

(2)

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



**(Total for Question 6 is 6 marks)**



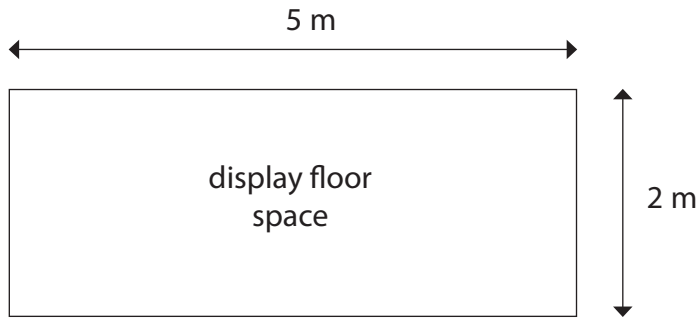
**SECTION C: Local newspaper**

**Answer all questions in this section.**

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

- 7 Tara works for the local newspaper.  
She wants to set up a display in the shopping centre for a week.

Tara thinks she wants a rectangular floor space 5 m by 2 m.



The cost for the floor space for the week is £85.95 for each square metre.

(a) What is the total cost for this floor space for the week?

(3)

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



A large empty rectangular box for writing the answer and showing the calculation.

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Tara wants enough space for her display board and for people to be able to look at it.

The display needs 6 square metres.

Tara decides to have a floor space of 8 square metres.

Tara says

'The display will use  $\frac{3}{4}$  of the floor space.'

(b) Is Tara correct?

Show why you think this.

(2)

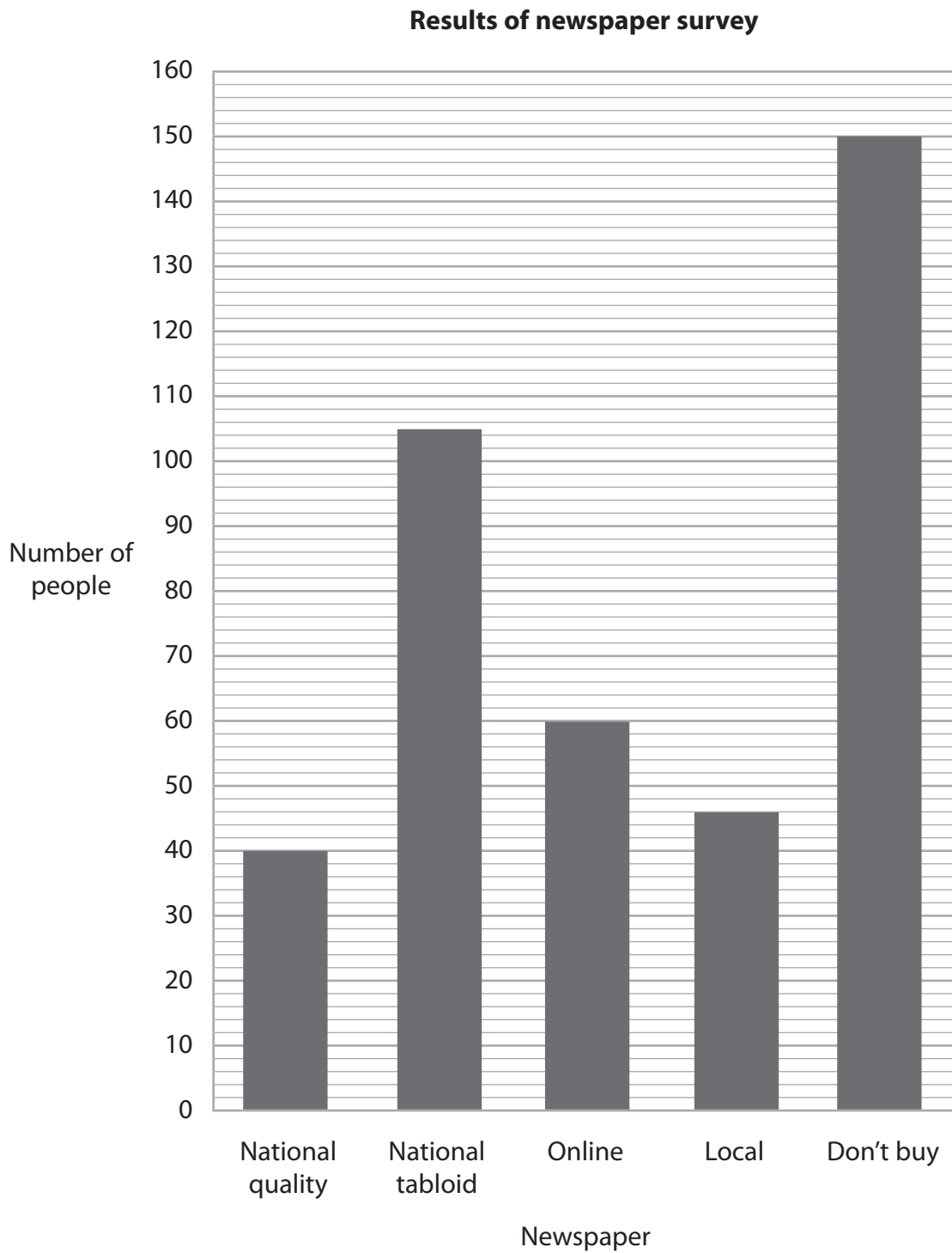
Use the box below to show clearly how you get your answer.



(Total for Question 7 is 5 marks)



- 8 Tara carries out a survey at the shopping centre.  
She wants to find out which newspaper people buy on Fridays.  
She draws a chart to show the results of the survey.



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA





Tara uses the chart to make this comment.

The number of people who buy a local newspaper is 50% of the number of people who buy a national tabloid on Fridays.

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

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



A large empty rectangular box for writing the answer.

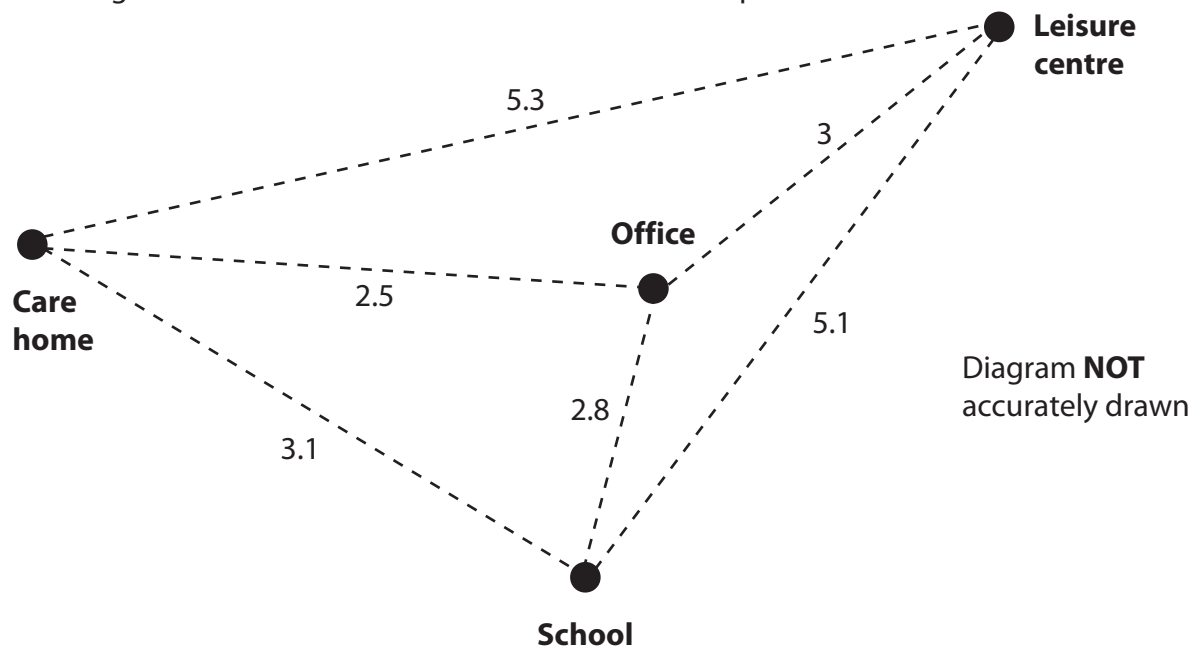
(Total for Question 8 is 5 marks)



9 Luke also works for the local newspaper.  
He needs to go to a school, a leisure centre and a care home to do interviews on Monday.

- He needs to
- start from his office
  - visit the school first
  - finish back at his office.

The diagram shows the distance in miles between the places.



Luke does not want to travel more than 15 miles to do these 3 interviews.

(a) Find a route for Luke.  
What is the total distance for this route? (3)

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



Luke wants to work out the mean average number of miles he drives for work.

Here is a record of the number of miles he drove in February.

Week 1	Week 2	Week 3	Week 4
67	53	42	108

(b) What is the mean average number of miles Luke drove in February?

(3)

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



(Total for Question 9 is 6 marks)

**TOTAL FOR PAPER = 48 MARKS**



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

**BLANK PAGE**

