

Centre No.						Paper Reference	Surname	Initial(s)
Candidate No.						<b>FM101 / 01</b>	Signature	

Paper Reference(s)

**FM101/01**

# Edexcel Functional Skills Mathematics

Level 1

Sample Assessment Material V2

Time: 1 hour 15 minutes



Examiner's use only

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Team Leader's use only

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**Materials required for examination**

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.

**Items included with question papers**

Nil

**Instructions to Candidates**

In the boxes above, write your centre number, candidate number, your surname, initials and signature. Check that you have the correct question paper. Answer ALL the questions. Write your answers in the spaces provided in this question paper. If you need more space to complete your answer to any question, use additional answer sheets.

**Information for Candidates**

The marks for individual questions and the parts of questions are shown in round brackets: e.g. (2). In this question paper there are 7 questions in Task 1, 7 questions in Task 2 and 6 questions in Task 3. The total mark for this paper is 60. There are 20 pages in this question paper. Any blank pages are indicated. **Calculators may be used.**

**Advice to Candidates**

Show all stages in any calculations. Work steadily through the paper. Do not spend too long on one question. If you cannot answer a question, leave it and attempt the next one. Return at the end to those you have left out.

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**TASK 1: HAPPY DAYS NURSERY**

**Answer all seven questions in this task.**

**Write your answers in the spaces provided**

**You must write down all stages in your working**

You are the manager of a nursery for children.

1. The table shows when young babies are at the nursery.

	Mon am	Mon pm	Tues am	Tues pm	Wed am	Wed pm	Thurs am	Thurs pm	Fri am	Fri pm
Aali	■		■		■		■		■	
Di	■	■	■	■						
Fadell		■			■					
Fred				■	■			■	■	■
Hary	■						■			■
Lamara			■	■			■	■	■	■
Jo		■				■				
Zan						■				
Molly										

(a) At what times does Fadell come to the nursery?

.....  
(1)

At any one time there can only be 3 young babies.

Another parent wants her young baby, Molly, to come for **two half days**.

(b) Write down the times when Molly can come to the nursery.

.....  
(2)

(Total 3 marks)

T1Q1



Leave blank

2. Here is a list of children aged 1 to 3 who come to the nursery on Monday.

Name	Boy/Girl	am	pm
Amal	B	✓	✓
Aarti	G	✓	
Barney	B	✓	
Ben	B	✓	✓
Claire	G		✓
Deval	B		✓
Eun	G	✓	
Ellie	G	✓	
George	B		✓
Hannah	G	✓	✓

Name	Boy/Girl	am	pm
Joshua	B		✓
Kate	G	✓	✓
Kelly	G	✓	
Mark	B		✓
Mindy	G	✓	✓
Tau	B	✓	✓
Taiwo	G	✓	
Tandi	G	✓	✓
William	B		✓
Worie	B	✓	

(a) How many children come to the nursery on Monday morning but **not** Monday afternoon?

.....  
(1)

3 boys come for the whole day.

(b) How many **girls** come for the whole day?

.....  
(1)

(Total 2 marks)

T1Q2

3. On Tuesday morning there are normally 8 members of staff and 24 children.

(a) For each member of staff, how many children are there?

.....  
(1)

On one Tuesday 2 members of staff are off.

(b) For each member of staff remaining, how many children are there?

.....  
(1)

(Total 2 marks)

T1Q3



Leave blank

4. There are four playrooms.  
In the Kanga and Piglet rooms, there must be at least 1 member of staff for every 3 children.  
In the Tigger and Owl rooms, there must be at least 1 member of staff for every 4 children.

The table shows this information about the playrooms.

Playroom	Number of staff	Number of children	Maximum children	Vacancies
Kanga	2	4	6	2
Piglet	2	6	6	0
Tigger	2	7		
Owl	2	6		

Complete the table using the information above.

(Total 2 marks)

T1Q4

5. This table shows the members of staff who work on Friday afternoons.

Mrs Li	Only works with children aged 2 or younger.
Mr Jones	Only works with children over 3 years old.
Miss Harlow	Only works with babies.
Mrs Sim	Only works with children aged 2 or older.
Miss Cook	Happy to work with all age groups.
Mr Hayes	Prefers to work with children aged 2 to 3.

The table below should only show the names of the members of staff who will work with each age group.

Write the name of one member of staff in each space in the table.

Babies	Ages 1 to 2	Ages 2 to 3	Ages over 3
1 staff	2 staff	1 staff	2 staff

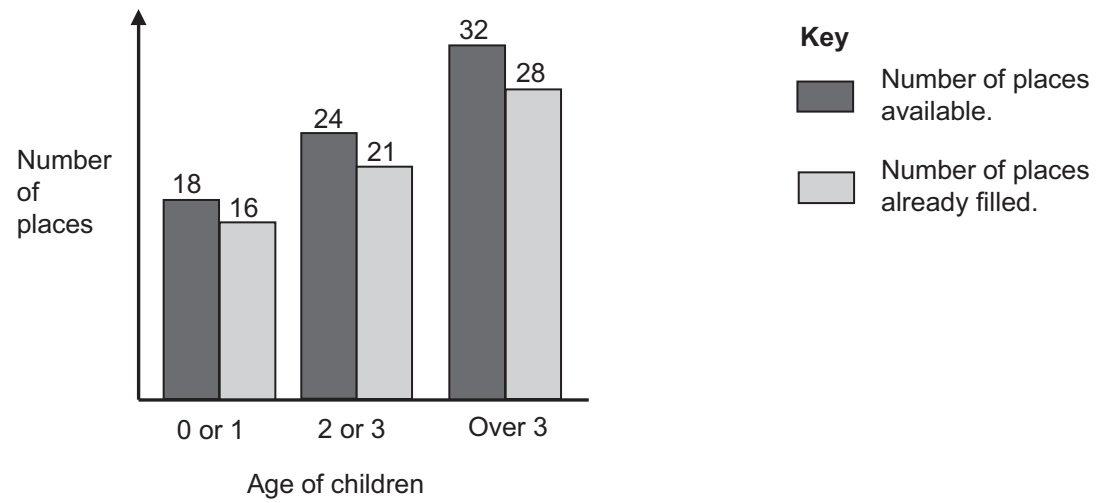
(Total 2 marks)

T1Q5



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6. The chart shows for next year  
the number of places available  
the number of places already filled (booked).



- (a) What is the total number of places available?

.....  
(2)

- (b) How many places are still to be filled?

.....  
(2)

For every place already filled, the nursery receives a fee of £38 each day.

- (c) What would be the total fees the nursery would receive on the places already filled?

£ .....  
(2)

(Total 6 marks)

T1Q6



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7. This table shows some information about the members of staff.

Member of staff	Gender	Age (yrs)
Mrs Li	Female	28
Mr Jones	Male	26
Miss Harlow	Female	20
Mrs Sim	Female	32
Miss Cook	Female	22
Mr Hayes	Male	22

(a)  $\frac{4}{6}$  of the staff are female. What fraction are male?

.....  
(1)

(b) What is the mean age of the staff?

.....  
(2)

(Total 3 marks)

T1Q7



**TASK 2: THE VEGETABLE GARDEN TASK**

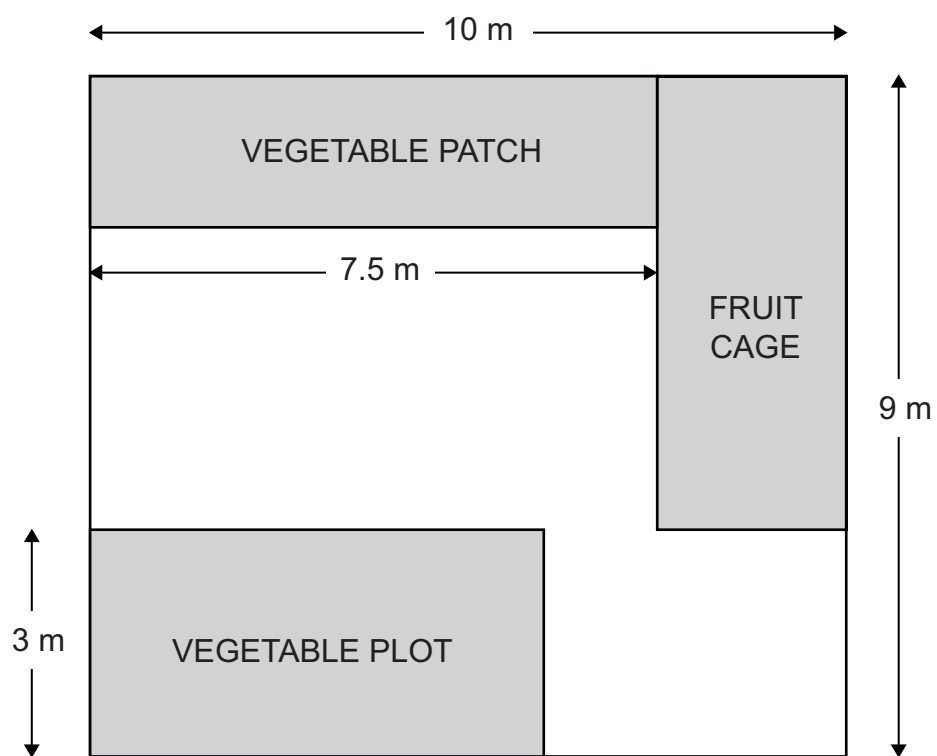
**Answer all seven questions in this task.**

**Write your answers in the spaces provided**

**You must write down all stages in your working**

A house has a large garden.  
Part of the garden is used for growing fruit and vegetables.  
The shape of the garden is a rectangle.

1.



(a) What is the perimeter of the garden?

..... m  
(1)

(b) What is the area of the garden?

..... m<sup>2</sup>  
(1)

(c) What is the area of the fruit cage?

..... m<sup>2</sup>  
(2)

(Total 4 marks)

T2Q1



Leave blank

2. You have **£50** to spend on garden tools.  
You need to buy the spade and the fork.



- (a) How much change should you have from £50?

£ .....  
(2)



These are the other garden tools you need to buy.

- (b) How much more money than the £50 do you need for all six garden tools?

£ .....  
(2)

(Total 4 marks)

T2Q2





Leave blank

3. You decide to grow potatoes and beans in the vegetable patch.  
You decide to use two-thirds of the large vegetable patch to grow potatoes.

Shade two-thirds of the vegetable patch for potatoes.


T2Q3

(Total 1 mark)

4. You buy a packet of carrot seeds.  
The packet shows this information:

		Months											
		J	F	M	A	M	J	J	A	S	O	N	D
When to sow the seeds													
When the carrots will be ready to eat													

Using the information from the seed packet:

- (a) Over how many weeks can you sow carrot seeds?

..... weeks  
(1)

- (b) Over how many weeks can you pick carrots from the vegetable patch?

..... weeks  
(1)

A packet of carrot seeds costs £1.20  
You have £10 to spend on carrot seeds.

- (c) How many packets can you buy?

.....  
(1)

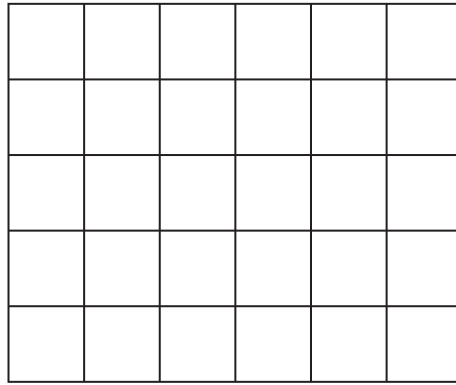
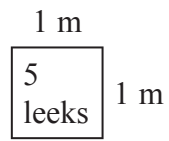
T2Q4

(Total 3 marks)



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5. You grow leeks in a vegetable plot.  
5 leeks are grown in each  $1 \text{ m}^2$  space.



VEGETABLE PLOT

- (a) What is the total number of leeks that can be grown in this vegetable plot?

.....  
(2)

You buy a packet of leek seeds.  
The packet shows this information.

From sowing to eating,  
only 42 days.

- (b) How many weeks is 42 days?

..... weeks  
(1)

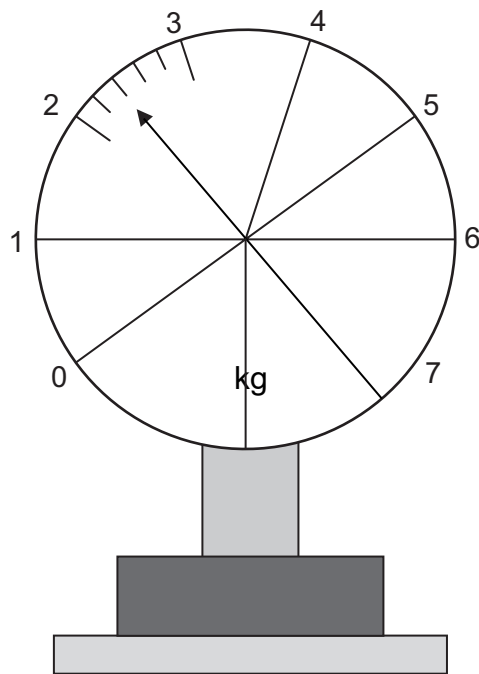
T2Q5

(Total 3 marks)



Leave blank

6. You pick some strawberries.  
The scale shows what they weigh.



- (a) How much, in kilograms, do the strawberries weigh?

..... kg  
(1)

- (b) Write your answer to part (a) in grams.

..... grams  
(1)

(Total 2 marks)

T2Q6



7. (a) If you planted and grew a whole packet of carrot seeds that cost £1.20, and harvested 20kg of carrots, how much would the carrots have cost you per kg?

.....  
(2)

(b) 20kg of carrots in a local supermarket cost £14.50. How much would you save by growing your own?

.....  
(1)

**(Total 3 marks)**

Leave  
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T2Q7



**TASK 3: THE ADVERTISING TASK**

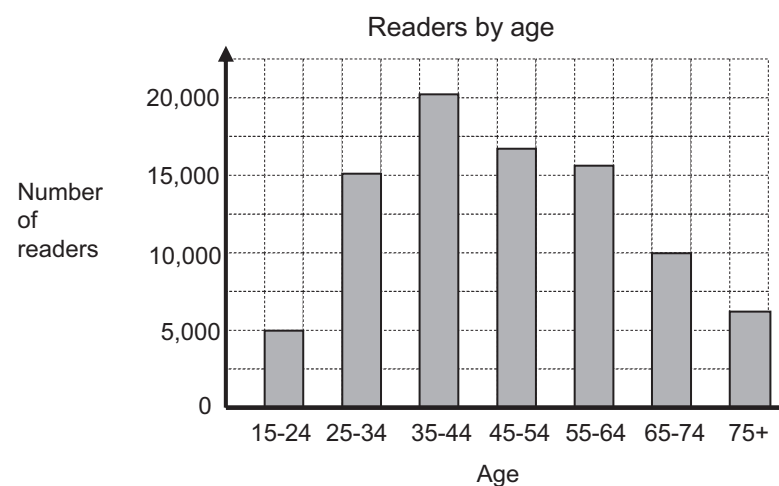
**Answer all six questions in this task.**

**Write your answers in the spaces provided**

**You must write down all stages in your working**

You work in a shop that sells clothes.  
Your manager wants to advertise in the local newspaper and on local radio.  
She asks you to find some information from the newspaper and radio about advertising.

1. The local newspaper sends you an information pack with facts and figures.  
The graph shows the number of people who read the newspaper.



- (a) Which age group is the most common?

.....  
**(1)**

Age group 65–74 had 10 000 readers.

- (b) Which age group had half of this number of readers?

.....  
**(1)**

**(Total 2 marks)**

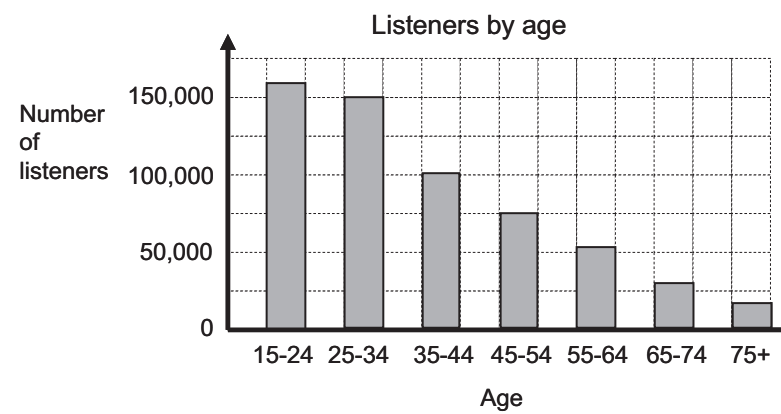
**T3Q1**



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2. The local radio also sends you an information pack.

The graph shows the number of people who listen to the local radio.



(a) What is the second most common age group for listeners?

.....  
(1)

(b) Write down an estimate for the number of listeners aged 45–54.

.....  
(1)

The combined age group of 25–44 had a quarter of a million listeners.

(c) Write a quarter of a million in figures.

.....  
(1)

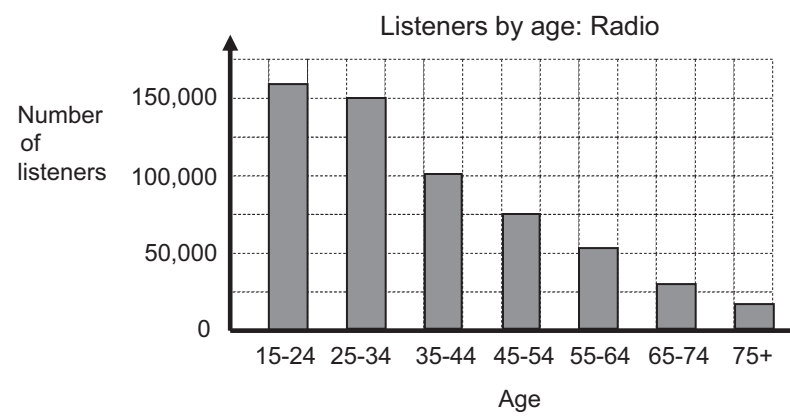
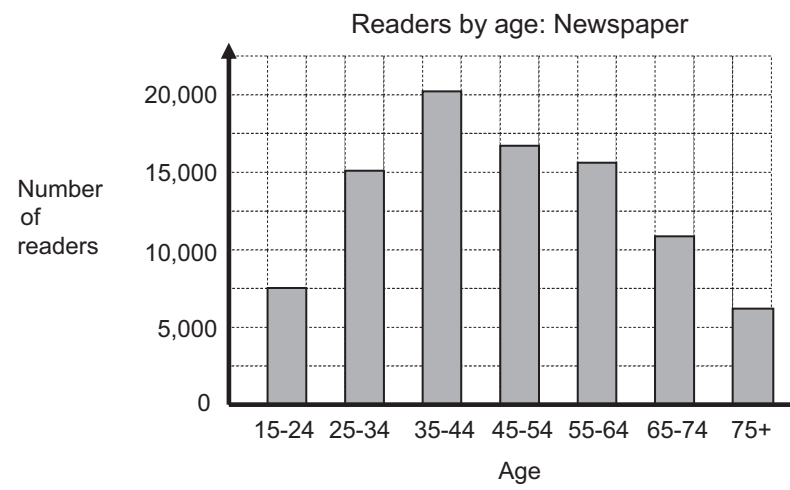
**(Total 3 marks)**

**T3Q2**



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3. Your shop sells mostly to people ages 25–44. Compare the two graphs.



Do more people ages 25–44 read the newspaper or listen to the radio?

.....

Give a reason for your answer.

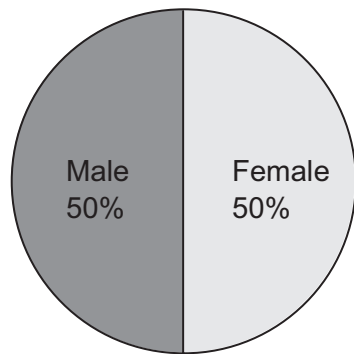
T3Q3

(Total 2 marks)



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4. Pie chart A shows the percentage of males and females who read the newspaper.

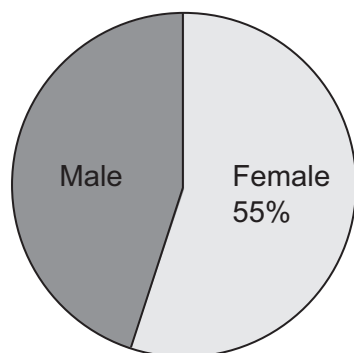


A

The total number of people who read the newspaper is 93 000.

(a) How many females read the newspaper?

.....  
(2)



B

Pie chart B shows that 55% listeners to the radio are female.

(b) What percentage are male?

..... %  
(1)

(Total 3 marks)

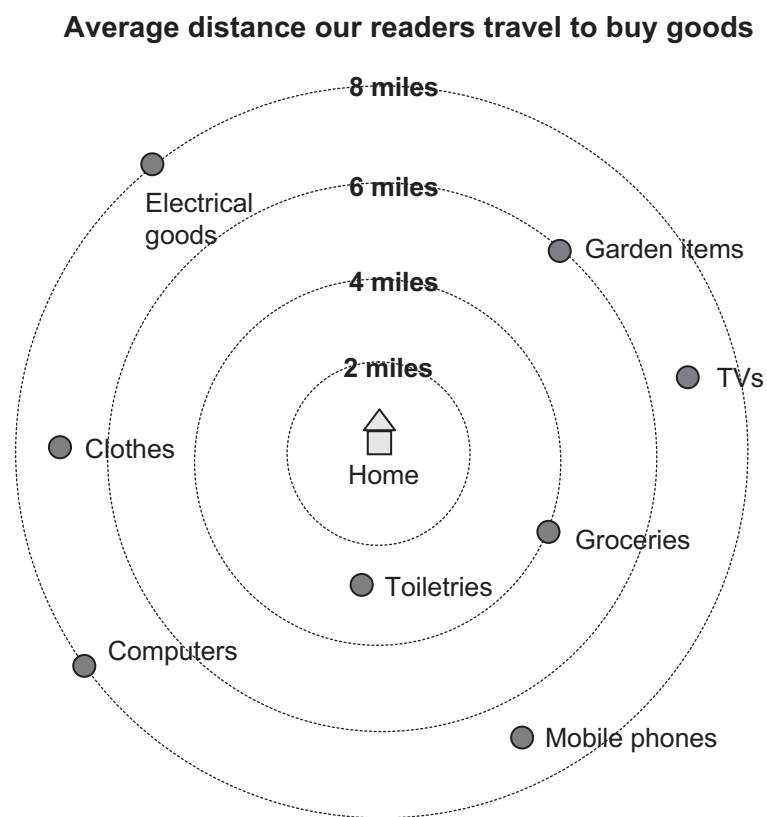
T3Q4





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5. This diagram shows the average number of miles that readers of the newspaper travel to buy goods.



- (a) What is the average number of miles people travel to buy clothes?

.....  
(1)

- (b) What is the average number of miles people travel to buy groceries?

.....  
(1)

(Total 2 marks)

T3Q5



6. This diagram shows the most popular days for different kinds of shopping.

**Key:** most popular day ● second most popular day ▲

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Computers	●	▲					
Clothes		▲				●	
DIY	▲					●	
Furniture					▲	●	

(a) What is the most popular day for clothes shopping?

.....  
(1)

(b) What is the **second** most popular day for clothes shopping?

.....  
(1)

The table shows how much newspaper adverts cost.

	Mon, Tue or Wed	Thu, Fri or Sat
Full page	£670	£1550
Half page	£370	£850

You want to buy one full page advert and one half page advert on different days.

(c) How much would the total cost be to buy a full page advert on Tuesday and a half page advert on Friday?

.....  
(1)

(d) How much would it cost to buy these two adverts for 4 weeks?

.....  
(1)



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The store manager decides to place  
a full page advert on Saturday  
a half page advert on Tuesday  
a radio advert costing £2940

(e) What is the total cost for the advertising?

£ .....  
(2)

The previous week a full page advert was placed on a Tuesday, a half page advert on a Saturday, and a radio advert.

The total cost was £4220

(f) How much did the radio advert cost?

£ .....  
(2)

T3Q6

(Total 8 marks)

**TOTAL FOR PAPER: 60 MARKS**

**END**



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