Pearson Edexcel
Functional Skills

Centre Number

Candidate Number

Mathematics
Level 1

13 – 17 March 2017
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 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 ▶

P 5 3 8 2 1 A 0 1 2 0

Pearson

Answer all questions in this section.

Write your answers in the spaces provided.

1 Norman and Siran run a market stall.
They sell fruit and vegetables.

Siran has 7 trays of fruits.
She wants to display them on one shelf of the stall.

She has
pears, cherries, oranges, bananas, strawberries, apples and lemons.

Siran must display them so that
- lemons are next to cherries
- bananas are at one end of the display
- pears are next to oranges
- bananas are **not** next to strawberries.

(a) Write the names of the fruits in the boxes below for Siran.

(2)

You may use the boxes below to practise.

Use the boxes below to show your final answer.

Norman gives regular customers a 15% discount loyalty card.

Mrs Brown has a loyalty card.
She buys fruit costing £4.60

(b) Work out 15% of £4.60

(2)

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

(Total for Question 1 is 4 marks)

Turn over ▶

2 Norman sells the same type of potatoes in bags of different weights.

Potatoes	Potatoes
500 g	2 kg
48p	£1.65

Norman says the 500 g bags of potatoes give the best value for money.

(a) Is Norman correct?
   Show why you think this.
   Show a check of your working.

   (5)

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

Write your check in the box below.

☑

P 5 3 8 2 1 A 0 4 2 0

Norman is going to put mirror strips around 3 sides of his display shelf.
His display shelf has 1 side of length 45 feet and 2 sides each of length 12 feet.

Diagram **not** accurately drawn

45 feet

12 feet   12 feet
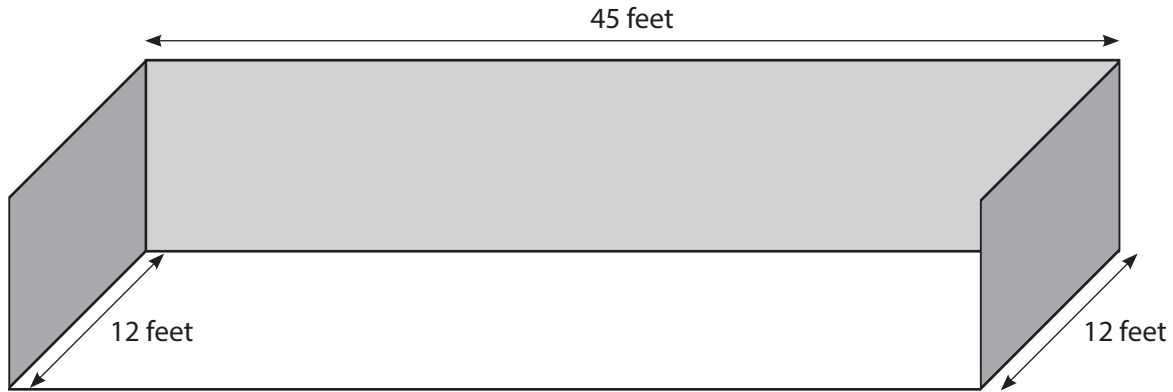
The mirror strips are all of length 3 feet.

Norman buys 25 mirror strips.

(b) Does Norman have enough mirror strips to go around all 3 sides of the shelf?

(3)

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

(Total for Question 2 is 8 marks)

3 Norman sells 200 raffle tickets.
The prize for the raffle is a basket of fruit.

Mrs Brown buys 3 of these raffle tickets.

(a) What is the likelihood of Mrs Brown winning the raffle?

(1)

Tick a box to show your answer.

impossible	unlikely	even	likely	certain

Norman asks each customer if they would like a home delivery service.
If they do, he needs some information.

He needs to know what time of day they would want a home delivery.
• morning
• afternoon
• evening

How far they live from the market.
• under 5 miles
• 5 – 15 miles
• over 15 miles

Norman needs a data collection sheet by each till.

(b) Design a data collection sheet for Norman.

(3)

Use the box below to show your data collection sheet.

(Total for Question 3 is 4 marks)

Answer all questions in this section.

Write your answers in the spaces provided.

4 Dean, Jan and their 2 children are visiting the wildlife centre.
The children are 12 and 5 years old.

Dean sees these admission prices.

Admission prices

Adult £12.60

Child (age 4–16) £6

Group ticket (2 adults and 2 children) £32

Dean thinks it will be cheaper to buy a group ticket for the visit.

(a) Is Dean correct?
Show why you think this. **(4)**

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

There is a wildlife walk at the centre.
Dean sees this notice at the start of the walk.

wildlife walk   3 miles

Dean uses this rule to change miles to kilometres.

| number of miles | → | multiply by 8 | → | divide by 5 | → | number of kilometres |
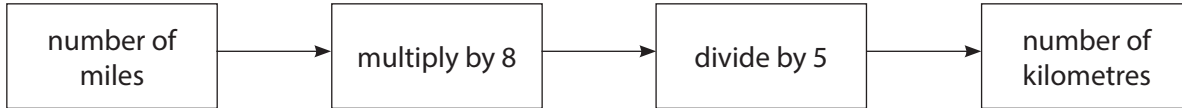
Dean thinks the walk is 4 kilometres long.

(b) Is the walk 4 kilometres long?
Show a check of your working. **(4)**

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

Write your check in the box below.

☑

(Total for Question 4 is 8 marks)

Turn over ▶

5 Jan wants to plan their visit.
She knows these activities are available.

Activity	Start time	Duration
flamingo talk	11.15	1 hour 15 mins
swan feeding	2.30	$\frac{1}{2}$ hour
lego brick animals workshop	12.00	1 hour
pond dipping	available all day	$\frac{1}{2}$ hour
den building	available all day	$\frac{1}{2}$ hour
bug hunting	available all day	$\frac{1}{2}$ hour
meet the reptiles	available all day	$\frac{1}{2}$ hour

Jan wants to
• arrive at 10.15
• go to the flamingo talk
• go to the swan feeding
• allow 30 minutes for lunch between 12.30 and 1.30
• go to 2 other activities
• be at the cafe by 4 o'clock.

She needs at least 10 minutes to travel between activities.

Write a plan for the visit for Jan.
You must show the start and finish times for each activity. **(5)**

Use the box below to show your plan.

(Total for Question 5 is 5 marks)

P 5 3 8 2 1 A 0 1 1 2 0

6 Dean, Jan and the children visit the cafe.
They see the price list for the drinks.

Tea	£1.30
Coffee	£1.50
Hot chocolate	£1.20

Dean wants to order 4 hot chocolates.

He thinks he will have change from a £5 note.

(a) Will Dean have any change from a £5 note?
Show why you think this.
(2)

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

Dean and Jan are planning to visit the wildlife centre again next week.

They want to go when
* the temperature is above 20°C
* the chance of rain is less than 24%

They find this information on the internet.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Temperature (°C)	17	20	19	24	18	21	23
Chance of rain (%)	24	17	34	16	77	15	52

(b) Choose a day next week for their visit.

(1)

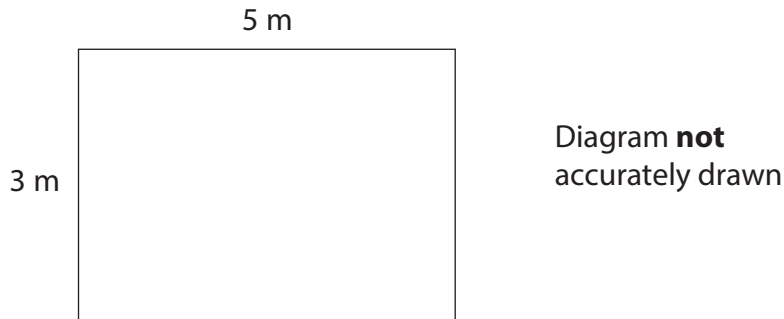Write your choice of day in the box below.

(Total for Question 6 is 3 marks)

7 Rashid is going to fit new flooring in his dining room.

He wants to cover the floor with carpet tiles.

The diagram shows a plan of the floor.

5 m

3 m

Diagram **not**
accurately drawn

Rashid knows that
• there are 10 tiles in a pack
• 4 carpet tiles will cover 1 m² of the floor.

Rashid buys 7 packs of carpet tiles.

(a) Does Rashid have enough tiles to cover the floor?
Show why you think this.

(4)

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

Turn over ▶

Rashid is going to paint the walls of his dining room light green.
He finds this information in a DIY shop.

> **To make light green paint**
>
> mix
> 1 litre of blue paint
> with
> 3 litres of yellow paint

Rashid is going to use 2 litres of blue paint to make light green paint.

(b) How much yellow paint does Rashid need to use?
Show a check of your working.

(3)

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

Write your check in the box below.

☑

(Total for Question 7 is 7 marks)

8 Rashid is going to buy a table and a display unit.
He wants to work out where to put them in his dining room.

The table needs

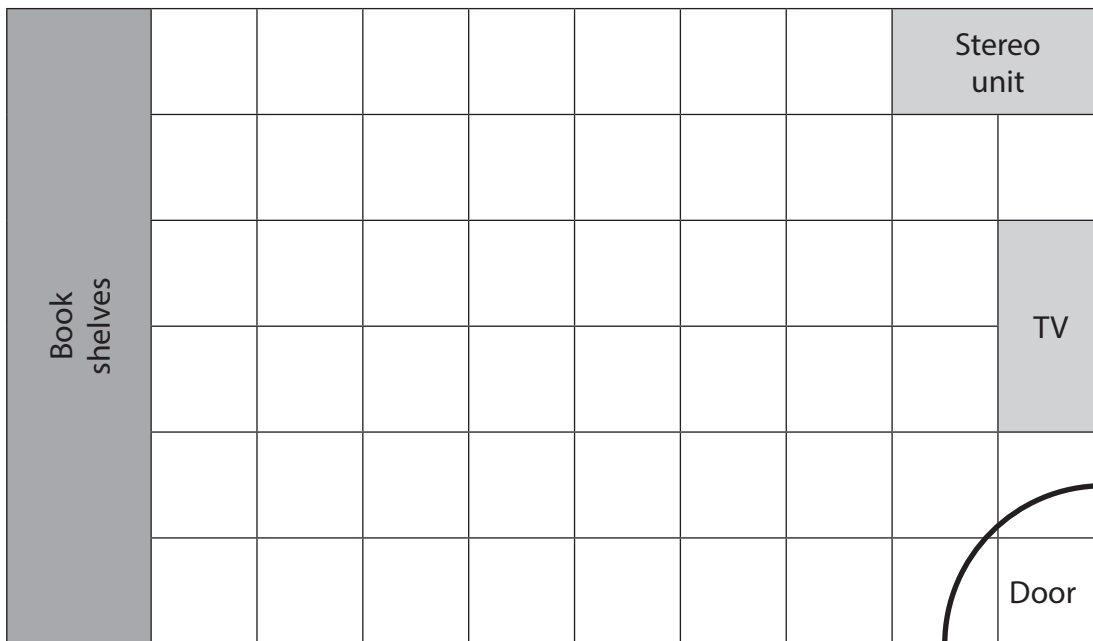* a rectangular space 200 cm by 150 cm.

The display unit needs

* a rectangular space $1\frac{1}{2}$ m by $\frac{1}{2}$ m

* the longest side against a wall.

He draws a plan of the dining room on a grid.

Draw the table and display unit on the plan for Rashid.

(4)

Key: 1 square on the grid is 50 cm by 50 cm in the dining room

(Total for Question 8 is 4 marks)

Turn over ▶

9 Rashid sees the dining table and the display unit he wants in 3 different stores.
Each store has a different offer for the table and the display unit.

House of Style

table and display unit

£95 deposit

and

12 monthly payments of £32

free delivery

Dining Outlet

buy today, pay $\frac{1}{3}$ normal price

table and display unit

normal price £1545

free delivery

Naveed's Dining Store

table   £199

display unit   £280

total delivery charge   £20

Rashid has a budget of £500

Which stores can Rashid afford to buy the table and the display unit from?
Show why you think this.

(5)

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

(Total for Question 9 is 5 marks)

TOTAL FOR PAPER IS 48 MARKS

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