

Write your name here

Surname

Other names

Edexcel
Functional Skills

Centre Number

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Candidate Number

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Mathematics

Level 1



8–12 October 2012

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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PEARSON

SECTION A: Health centre

Answer all questions in this section.

Write your answers in the spaces provided.

- 1** Angelo goes to the health centre.
He has an appointment to see the nurse.

He arrives at the surgery at 8.45 am.
His appointment is at 9.10 am.

(a) How long does Angelo have to wait until his appointment time?

(2)

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



The nurse takes Angelo's pulse.
She wants to know how many times his heart beats in one minute.

She counts 23 heart beats in 15 seconds.

(b) How many times does Angelo's heart beat in one minute?

(2)

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



The nurse takes Angelo's blood pressure.
She takes his blood pressure three times.

Each time she writes down the top reading and the bottom reading.

	top reading / bottom reading
reading 1	190 / 81
reading 2	184 / 75
reading 3	172 / 87

The nurse finds the mean average of 190, 184 and 172

Angelo will have to go to the doctor if the mean average is more than 180

(c) Will Angelo have to go to the doctor?

(3)

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



(Total for Question 1 is 7 marks)



2 Kim works as a receptionist in the health centre.

She makes appointments for patients to see the nurse.

Kim has marked the diary to show when the nurse is not available.
She has written some appointments in the diary.

Kim needs to make appointments with the nurse for these patients.


- Mrs Green, 20 minutes on any day before 11 am
- Sue Collins, 30 minutes on Wednesday
- Jon Little, 20 minutes on Tuesday
- Mr Sharma, 30 minutes on Monday after 10.30 am

Write appointments in the diary for these patients.

(5)



Nurse			
Start time	Monday	Tuesday	Wednesday
9.00		Ella Hammond	
9.10		Ella Hammond	Lesley Hawkins
9.20		Ella Hammond	Lesley Hawkins
9.30		Steve Smith	
9.40		Steve Smith	
9.50			
10.00			Ahmed Patel
10.10			Ahmed Patel
10.20			Ahmed Patel
10.30			
10.40			
10.50			
11.00	Liz Jones	Home visits	
11.10		Home visits	
11.20		Home visits	
11.30		Home visits	
11.40		Home visits	
11.50		Home visits	
12.00		Home visits	

Key:  nurse not available

(Total for Question 2 is 5 marks)



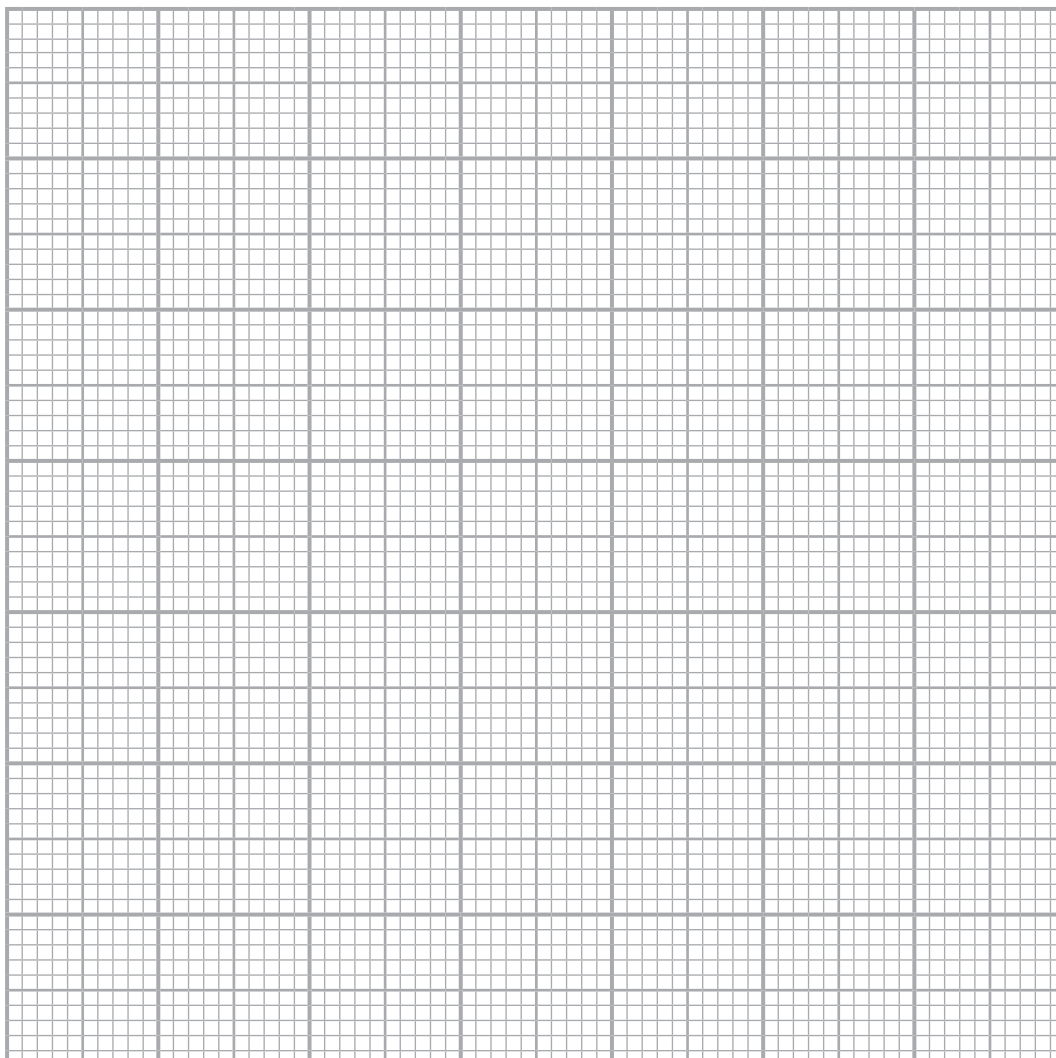
- 3 Kim keeps a record of the number of missed appointments. She has this information for the first six months of this year.

Month	Jan	Feb	Mar	Apr	May	Jun
Number of missed appointments	64	55	48	30	34	42

Kim wants to display this information.

- (a) Draw a graph or chart to display the information.

(3)



Kim wants to write a comment about the number of missed appointments in the first six months of this year.

Month	Jan	Feb	Mar	Apr	May	Jun
Number of missed appointments	64	55	48	30	34	42

(b) Write a comment for Kim.

(1)

Write your comment in the box below.

(Total for Question 3 is 4 marks)



SECTION B: Owning a dog

Answer all questions in this section.

Write your answers in the spaces provided.

4 Craig is going to get a puppy.

His friend's dog has just had puppies.

Here is some information about the puppies.

black and white (male)	black (female)
black (female)	black (male)
white (male)	black and white (female)

Craig decides to pick a puppy at random.

(a) How likely is it that Craig will pick a female puppy?

(1)

Write your answer in the box below.



The puppies were born on the 11th of April.

Craig can get the puppy when it is between 8 and 10 weeks old.
He can only collect the puppy on a Saturday or a Sunday.

Craig uses a calendar to work out when he can collect the puppy.

April							May							June						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7			1	2	3	4	5						1	2
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30						27	28	29	30	31			24	25	26	27	28	29	30

(b) Choose a date for Craig to collect the puppy. (2)

Write your answer in the box below.



Craig wants to buy some puppy food.

The same type of food is on sale in two shops.

Pet Town

Puppy food
£5.65

buy 2 bags get
the 3rd bag free

Dogs Central

Puppy food

Special offer!

£3.80 per bag

Craig needs **3 bags** of puppy food.

He wants to pay as little as possible.

(c) Which shop should Craig buy the food from?

(3)

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



(Total for Question 4 is 6 marks)



5 Craig wants to buy pet insurance.

The insurance costs £11.50 per month.

Craig will get a 10% discount if he buys the insurance for one year.

(a) How much money will Craig save in total if he buys the insurance for one year? (3)

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



Craig has to take his puppy to the vet.

The bill from the vet is for £97.65

Craig has to pay £25

The insurance company will pay the rest of the bill.

(b) How much will the insurance company have to pay?
You must show how you checked your answer.

(2)

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 for the problem.

(Total for Question 5 is 5 marks)



6 Craig is going on holiday.

A friend will look after his puppy.

Craig needs to give his friend enough food for the puppy for 21 days.

Craig's puppy has

- 60 grams of food each morning
- 100 grams of food each evening.

Craig gives his friend two 1.5 kg bags of food.

Has Craig given his friend enough food for the puppy for 21 days?

(5)

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



A large empty rectangular box for writing the solution to the problem.

(Total for Question 6 is 5 marks)



SECTION C: Knitting

Answer all questions in this section.

Write your answers in the spaces provided.

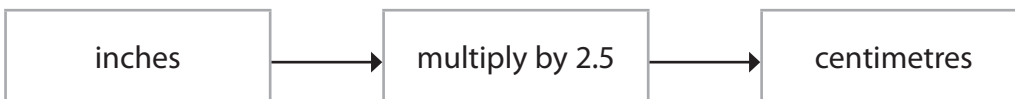
- 7 Linda is going to knit a cardigan for Sam.
She needs to work out which size of cardigan to knit.



Size of cardigan	small	medium	large	extra large
Chest measurement (centimetres)	75 – 80	81 – 86	87 – 92	93 – 98

Sam's chest measurement is 36 inches.

Linda uses this rule to change inches into centimetres.



(a) Which size of cardigan should Linda knit for Sam?

(3)

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



Linda is going to buy wool and buttons to make the cardigan.

She needs to buy

- 7 balls of wool
- 6 buttons.

Linda can choose from three different types of wool.

Type of wool	Cost per ball
Acorn wool	£2.90
Bright wool	£3.15
Cherry wool	£3.40

Buttons cost 35p each.

Linda has a budget of £25 to buy the buttons and the wool.

(b) Which of these types of wool can Linda afford to buy?

(4)

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



(Total for Question 7 is 7 marks)



8 Linda is going to make a blanket.

She knits some squares.

She joins the squares together to make the blanket.

Each square is 20 cm by 20 cm.

Linda wants the blanket to be 200 cm by 160 cm.

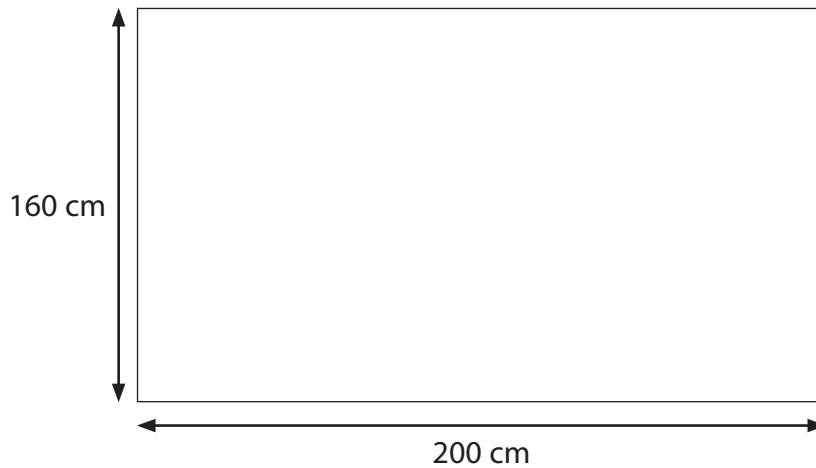


Diagram **NOT**
accurately drawn

Linda thinks she needs 60 squares to make the blanket.

(a) Is Linda correct?
Show why you think this.

(4)



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



A large, empty rectangular box with rounded corners, intended for students to show their work.



Linda is going to make a blanket for a baby.

This blanket needs 36 squares.

Linda knits white squares and yellow squares.

She knits 3 white squares to every 1 yellow square.

(b) How many squares of each colour must Linda knit?
Show a check for your answer.

(3)

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 work and calculations.



Linda makes another blanket from 64 squares.

She is going to use 16 black squares to make a pattern.
All the other squares are white.

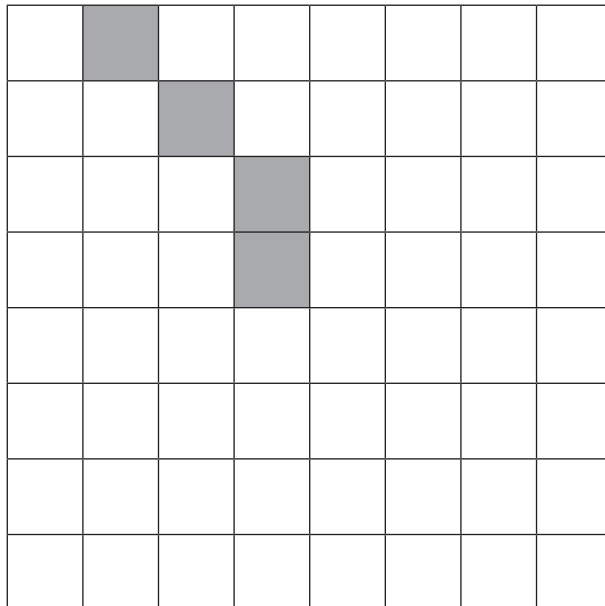
Linda wants the blanket to have a **symmetrical** pattern.

She starts to draw the pattern on a grid.
Linda shades where she will put 4 of the black squares.

(c) Complete the pattern for Linda.

(2)

Shade 12 more squares to make a symmetrical pattern on the grid.



(Total for Question 8 is 9 marks)

TOTAL FOR PAPER IS 48 MARKS



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