

Please write clearly in	block capitals.		
Centre number		Candidate number	
Surname			
Forename(s)			
Candidate signature			

Morning

Functional Skills Certificate FUNCTIONAL MATHEMATICS

Level 1

Thursday 8 November 2018

Materials

For this paper you must have:

- a calculator
- mathematical instruments
- a copy of the Data Book (Examination) (enclosed).

Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.
- State the units of your answer where appropriate.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 60.
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.
- Evidence of checking is specifically assessed in Questions 2(d) and 4(c). These questions are indicated with a **†**.

Advice

• In all calculations, show clearly how you work out your answer.



For Examiner's Use
Question Mark
1
2
3
4
TOTAL

Time allowed: 1 hour 30 minutes

IB/M/Nov18/E7

Answer all questions in the spaces provided. 1 Angling There is a data sheet for Angling. 1 (a) In an angling competition there are 7 semi-finals with 12 anglers 5 semi-finals with 16 anglers 3 semi-finals with 24 anglers. In total, how many anglers qualify for the final? [3 marks]	bo not write outside the box
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[3 marks]	
1 (b) Each semi-final lasts for 36 hours	
One semi-final starts at 09 00 on March 12th.	
When does this somi final finish?	
Circle your answer	
[1 mark]	
09 00 on March 13th 21 00 on March 12th	
09.00 on March 14th 21.00 on March 13th	



)	In one semi-final, the winner catches 10 fish.
	The total weight of the 10 fish is 148 pounds.
	In the same semi-final, Laura catches 6 fish.
	The total weight of the 6 fish is 90 pounds.
	Laura says,
	"The mean weight of my fish is more than the mean weight of the winner's fish."
	Is she correct?
	You must show your working. [3 marks]
	[•
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Do not write outside the box

1 (e) The table shows information about the 12 anglers in the final of a different competition.

Angler	Total weight of fish		Number of fish	Heavie	st fish
Todd	117 lb	3 oz	6	25 lb	2 oz
Kevin	88 lb	12 oz	3	34 lb	5 oz
Rose	99 lb	5 oz	4	30 lb	0 oz
Lata	123 lb	0 oz	6	27 lb	3 oz
Ben	136 lb	7 oz	7	28 lb	7 oz
Amy	131 lb	15 oz	10	19 lb	12 oz
Cath	103 lb	8 oz	4	29 lb	4 oz
Harry	70 lb	1 oz	3	31 lb	8 oz
Steve	136 lb	7 oz	8	24 lb	13 oz
Ju	129 lb	4 oz	9	32 lb	1 oz
Divit	86 lb	6 oz	4	27 lb	10 oz
Fred	130 lb	14 oz	11	18 lb	11 oz

List the anglers who came first, second and third in this final.

[3 marks]

First _____

Second _____

Third ______







Do not write outside the box

2	(b)	Emmie is 23 years old.				
		She lives on her own in Kribly.				
		The Council Tax band for her home is B .				
		She says, "With 25% discount my Council Tax will still be more than £1000 per year."				
		Is she correct?				
		You must show your working. [5 marks]				
2	(c)	Emmie's parents live in Kribly.				
		They pay £2580 Council Tax.				
		How much of the £2580 does the council use for buses?				



		Do out
(d)	Dan and Mary are both disabled adults.	
	They live together in Heath.	
	The usual Council Tax band for their home is D .	
	Their home is adapted for their needs, so is re-banded.	
	By how much is their Council Tax reduced?	
	[2 ma	rks]
	Check your answer.	
	[1 m	ark]
		— _
	Turn over for the next question	



3 Winter Wonderland



Do not write outside the box



This is Jane and her two children.





3	(a)	Jane is planning a visit to Winter Wonderland. Here are the ticket prices.	Do not write outside the box
		Ticket Prices £38 per adult or child aged 5 and over £25 per child aged under 5 How much will Jane pay for tickets for herself and her two children? [2 marks]]
3	(b)	Winter Wonderland opens at 10 am	-
		Jane and her children want to arrive 30 minutes before it opens. They live 80 miles away. Jane will drive 40 miles each hour. What is the latest time they should set off? [4 marks	I
			-
			-



Turn over ►





Practise on this plan.						
Activity	Start time	Length of activity	End time			
Lunch	12 00	1 hour	13 00			
Mrs Christmas	13 00	20 mins	13 20			
Elves	15 30	30 mins	16 00			

Use this plan for your answer.

Activity	Start time	Length of activity	End time
Lunch	12 00	1 hour	13 00
Mrs Christmas	13 00	20 mins	13 20
Elves	15 30	30 mins	16 00



Do not write outside the box

Do not write outside the box

3 (d) Myra and some friends are going to Winter Wonderland. They will stay for 3 nights.

Myra looks at the prices of different-sized lodges.

	Size of lodge			
Arrival uale	Sleeps 4	Sleeps 5	Sleeps 6	
Friday 23rd Nov (3 nights)	£320	£385	£455	
Friday 30th Nov (3 nights)	£378	£439	£495	
Friday 7th Dec (3 nights)	£410	£450	£545	

Myra is booking lodges for 15 people.

They will arrive on Friday 7th December.

She can book three lodges that sleep 5 or one lodge of each size.

She says,

"Booking three lodges that sleep 5 is cheaper by more than £50"

Is she correct? You **must** show your working.

[5 marks]

16







IB/M/Nov18/4367







	Leah wants to make 60 cards with the Christmas tree design.	
4 (b)	Leah wants to add a bow made of ribbon to each card.	
	Each bow uses 40 cm of ribbon.	
	The ribbon costs £1.50 per 2-metre roll.	
	Leah says,	
	"It will cost £18 to buy the rolls of ribbon I need for 60 cards."	
	Show that she is correct.	
		[4 marks]
	Leah buys card blanks in packs of 10	
	Mark aut have many marke also manda fan CO aanda	
+ (C)	work out now many packs she needs for 60 cards.	[2 marks]
	Check your answer.	
	Show how you have done your check.	
		[1 mark]



4	(d)	Card blanks cost £7.50 per pack.	

The table shows the costs of the items she needs to decorate the card blanks.

	Total cost
Felt	£4
Ribbon	£18
Other costs	£5.60

Leah sells all 60 cards for £2.75 each.

She says,

"I have made more than £90 profit on the cost of making the cards."

Is she correct? You **must** show your working.

[6 marks]

Do not write outside the box

END OF QUESTIONS







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Question	Additional page, if required.
number	Write the question numbers in the left-hand margin.



Question number	Additional page, if required. Write the question numbers in the left-hand margin.
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