

## SKILLSFIRST LEVEL 1 FUNCTIONAL SKILLS QUALIFICATION IN MATHEMATICS

#### SECTION B - QUESTION AND ANSWER PAPER (RFSML1SAM01)

### **CALCULATOR – 1 HOUR AND 30 MINUTES**

#### SAMPLE ASSESSMENT MATERIAL

#### Do not open this paper until you are told to do so by the invigilator.

Overall assessment marks available: **60** Overall assessment time limit: **2 HOURS** 

There are **TWO** Sections to this assessment:

- Section A please ensure you have handed in Section A before beginning Section B
- Section B includes Task 2, 3 and 4. You can use a non-scientific calculator for this section. Total marks available: 45. Time limit: 1 hour and 30 minutes.

#### For Section B you need:

- This question and answer paper
- A pen with black or blue ink
- A pencil
- A ruler
- A non-scientific calculator

#### INTERNET ACCESS IS NOT PERMITTED

You now have a further 1 hour and 30 minutes to complete Section B.

#### Instructions

1. Please sign and date below to confirm that your details are correct and that you have understood the instructions.

- 2. Read each task and question carefully.
- 3. Remember to show all your workings out clearly.
- 4. The number of marks available for each question is shown in brackets. Use these marks to guide you on how long to spend on each question.
- 5. Answer **all** questions using the space provided on this question and answer paper.
- 6. If you have time, check your work for **Section B** at the end.
- 7. If you use extra paper, write your name, learner number and the question number you are answering on it, and securely attach it to this question and answer paper.

8. At the end of this section (**Section B**), hand in this question and answer paper and all notes to the invigilator.

Learner full name:	
Learner number:	Centre number:
Learner signature:	Date:



## **Section B**

### Task 2 (15 marks)

#### Question 8

A bag contains 6 red balls, 6 yellow balls and 6 blue balls. Express as a fraction the probability of picking out a blue ball. (1 mark)

Show your calculations and/or workings out here:

Write your answer in this box.

#### **Question 9**

Convert  $\frac{5}{8}$  to a percentage.

(1 mark)

Show your calculations and/or workings out here:



Calculate 2.5 ÷ 0.375.

Give your answer to two decimal places.

(1 mark)

Show your calculations and/or workings out here:



a) Jared owns a bakery. He receives an order for party cakes to serve 72 people. He has this list of ingredients:

Party Cake Ingredients	
(Serves 12 people)	
400g flour	
400g butter	
375g sugar	
6 eggs	

Jared has 2 <sup>3</sup>⁄<sub>4</sub> kg of flour.

How much flour will Jared have left over if he bakes enough cakes for everyone at the party? Give the units in your answer. (4 marks)

Show your calculations and/or workings out here:



b) Jared wants to bake 6 loaves of bread. A loaf of bread takes 7 minutes to prepare. Jared will bake all the loaves at the same time. The loaves will take 45 minutes to bake. He allows 10 minutes for them to cool down.

What is the latest time that Jared should start preparing his first loaf of bread so that all the loaves are cooled by 6.15am?

(3 marks)

Show your calculations and/or workings out here:



c) Jared needs to buy decorations for a celebration cake. He sees this price list at his local trade store.

Item	Price
Candles	13p each
lcing	£1.40 per packet
Sugar Alphabet Letters	56p each

20% discount if you use your trade card

Jared will use his trade card to buy the decorations. He buys 20 candles, 2 packs of icing and 15 letters to make the word CONGRATULATIONS.

How much money will Jared spend on the decorations using his trade card?

Show your calculations and/or workings out here:

(4 marks)



d) Use approximation to check the amount of the trade discount.

(1 mark)

Show your calculations and/or workings out here:



### Task 3 (15 marks)

#### Question 12

Write 'One hundred and ninety thousand, four hundred and ninety three' in numbers.

(1 mark)

Write your answer in this box.

Question 13

The table below shows interest rates from 5 different banks.

Bank A	Bank B	Bank C	Bank D	Bank E
4.72%	4.07%	4.726%	4.672%	4.76%

Which bank offers the highest interest rate?

(1 mark)



The table below shows the scores of 16 students in an exam.

42	33	28	19	35	41	36
38	31	29	27	44	40	28
39	14	ŀ				

Complete the table below to show frequency.

(1 mark)

Number of marks	Frequency
0 – 9	
10 – 19	
20 – 29	
30 – 39	
40 – 49	



a) Ryan is a member of a five a side football team.

The table below shows the goal difference for Ryan's team over the last 4 football matches.

#### Goal difference is the number of 'goals for' minus the number of 'goals against'.

Complete the table below to show the missing values.

(3 marks)

Match	Goals For	Goals Against	Goal Difference
Match 1	2		-1
Match 2		3	0
Match 3	1		-3
Match 4	1	3	
Totals			

b) Ryan's team are playing a match on Saturday. The table below shows the predicted chance of rainfall on a scale of 0 to 1 from Monday to Saturday.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Predicted chance of rainfall (%)	40%	50%	35%	0%	92%	88%

Ryan thinks it is unlikely to rain on Saturday.

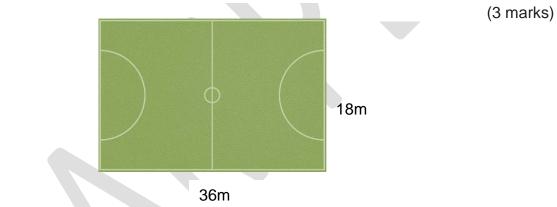
Is Ryan correct? Explain why you think this.

(1 mark)

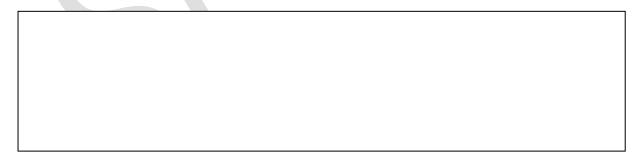
Write your answer in this box.



c) The players in Ryan's team warm up before the charity match by running at least 1km around the edge of the pitch. How many full laps of the pitch will they need to run?



Show your calculations and/or workings out here:





d) Ryan's team sold 380 tickets for the charity football match.

35% of the tickets sold were for children and 20% of the tickets were sold for senior citizens. The rest of the tickets were sold at full price for adults.

Ryan thinks that 176 tickets were sold at full price for adults.

Is Ryan correct?

(3 marks)

Show your calculations and/or workings out here:

Write your answer in this box.

e) Ryan has collected £3697.40 from the 380 ticket sales. The football club will donate £2.94 from each ticket to charity.

How much money will be left after the donation?

(2 marks)

Show your calculations and/or workings out here:



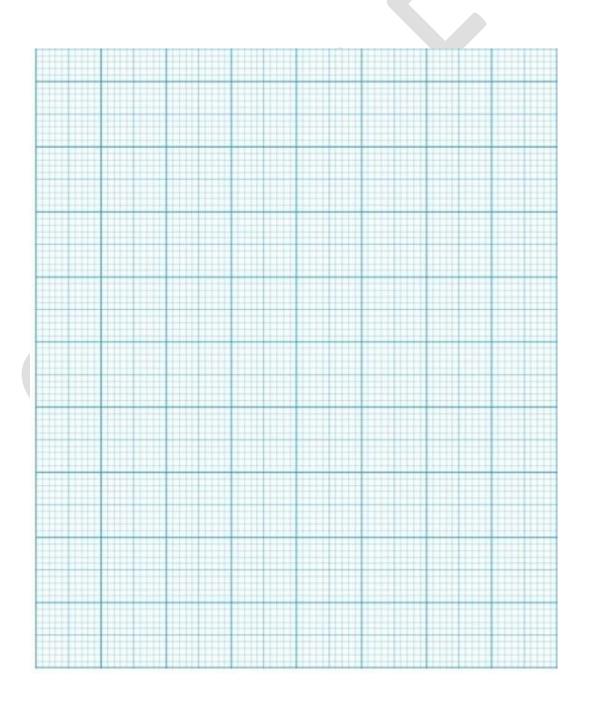
## Task 4 (15 marks)

### Question 16

The table below shows sales of laptops over a 6-month period.

Sales of laptops						
Months	Jan	Feb	Mar	Apr	May	June
Number of laptops sold	28	144	82	126	94	172

Draw a bar chart to show the sales of laptops over the 6-month period. (3 marks)

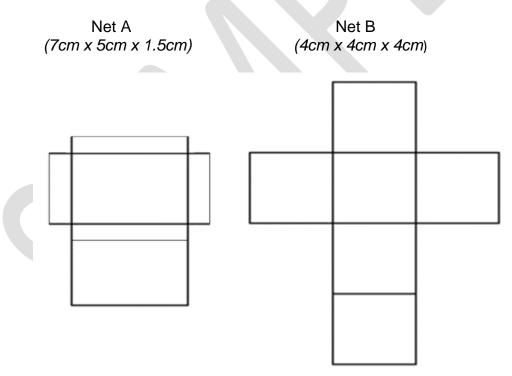




a) Davinder makes jewellery that she sells to local markets. She wants to buy some small boxes with lids, like the picture below, to put necklaces in.

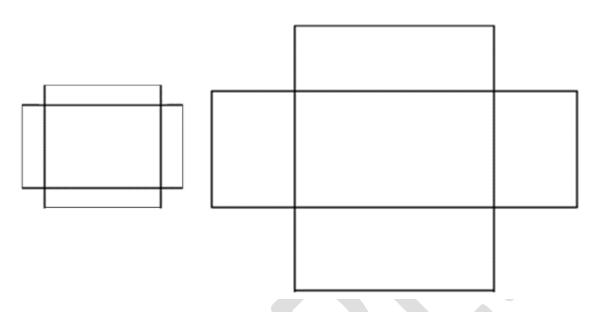


She receives a selection of boxes to choose from. The net diagram of each box is shown below.





Net C (7cm x 5cm x3cm) Net D (10cm x 8cm x 3cm)



Which net diagram best represents the box shown in the picture? Explain the reason for your choice of net in the box below. (2 marks)





b) Davinder has received an order for 100 bracelets.

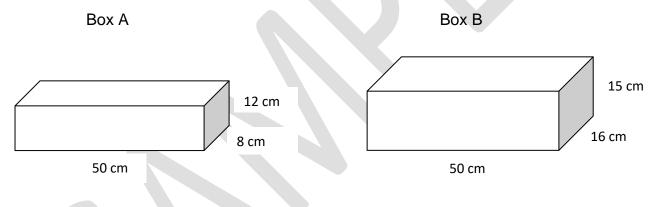
She packages each bracelet into a box 10cm by 8cm by 3cm.



Davinder will put the 100 boxes of bracelets into larger boxes for postage and delivery.

She has a choice of Box A or Box B, with measurements as shown below. She will only use one size of box.

Box A costs  $\pounds 0.70$  each and Box B costs  $\pounds 1.80$  each. She wants to spend as little as possible.



Should Davinder choose Box A or Box B?

(4 marks)

Show your calculations and/or workings out in the box at the top of the next page.



Show your calculations and/or workings out here:



a) Davinder wants to know what her best-selling item of jewellery is and which jewellery item sold the most consistently over the 6-month period from July to December.

She has this information:

Jewellery item	Mean of items sold per month	Range of items sold per month
Bracelets		
Necklaces	47	84
Rings	35	62
Earrings	39	71

The table below shows the sales of bracelets over the 6-month period:

Months	Jul	Aug	Sept	Oct	Nov	Dec
Number of Bracelets Sold	23	22	38	28	44	97

Which is the best-selling jewellery item over the 6-month period? (2 marks)

Show your calculations and/or workings out here:



b) Which jewellery item sold the most consistently over the 6-month period?

(2 marks)

Show your calculations and/or workings out here:



c) Davinder makes a profit of £1592 from jewellery sales. She wants to use a third of the profit to buy more stock and pay the remainder into a savings account.

How much money will Davinder pay into the savings account? (2 marks)

Show your calculations and/or workings out here:

Write your answer in this box.

[End of assessment]







