BROAD EXAMINATIONS®

P.7 MATHEMATICS EXAMINATION TRIAL SET I TERM I - 2023

Time allowed: 2 hours 30 minutes.			
Candidate's Name:		• • • • • • • • • • • • • • • • • • • •	
Candidate's Signature			
School Name:			
		-	
Read the following instructions carefully:	FOR	XAMINE	R'S
1. This paper is made up of two sections: A and B.	U	SE ONLY	
2. Section A has 20 questions (40 Marks).	PAGES	MARKS	SIGN
3. Section B has 12 questions (60 Marks).	Page 2		
Answer ALL questions in both sections A and B.	Page 3		
5. All answers must be written in the space provided in			
blue or black ball point pens and ink. Only diagrams should	Page 4	3 37 .4	
be done in pencil.	Page 5		*.
6. Unnecessary crossing of answers will lead to loss of marks.	Page 6		
Any handwriting, which cannot be easily read, may lead to loss of marks.	Page 7		
Do not fill anything in the boxes indicated for	Page 8	Si Saga	
Examiners' use only.	TOTAL		
Teacher's comment to the learner			
Ar	oproved by:		
	and f		
	eam Head Mai	hematics i	Dept.

SECTION .A. (40 Marks)

	SECTION .A.	(40 N	lai K3)
	Write the place value of 3 in 2 3 4.	2.	Work out;
1.	Write the place value of 3	3	2 3 9
			+5 4 8
			+340
	• "		
		4	9 7
	1 2 2 2		· · · · · · · · · · · · · · · · · · ·
			i anonte
	· · · · · · · · · · · · · · · · · · ·	4.	Expand 2706 using exponents.
3.	Given that; $K = \{m, o, n, d, a, y\}$,		
	L = {t, u, e, s, d, a, y}		
	[= {c, a, c, s,		
	Find K ∩L.	, *	2 th
	Tille IXT		
			* *
		-	
			× × ×
		7/19	
		4	Which integer is 4 steps to the left of
j.	Find the next number in the sequence	6.	
,.	4 2 4 40 45		1.1.2.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
	1, 3, 6, 10, 15,		
		5	
			Transfer to the second of the
		A 14.	
		. ,	
			Using a ruler, a pencil and a pair of
	Work out the area of a square garden	8.	Using a ruler, a period and a panale of
7.	Work out the area of a square	1 1 1	compasses only, construct an angle of
	whose side is 14m.		90°.
			70.
		2	
			· · · · · · · · · · · · · · · · · · ·
			The figure of the second of th
		40	In a line of girls, Barbra is the 7 th
	Given that $a = 3$, $b = -2$ and $c = 6$,	10.	III a tille of girts, barbia is are
9.	Given that a = 5, 5 = 2 and 2		from either side. How many girls are
	find the value of <u>ac</u> .	1	in the line?
	b		in the tine.
		-	
		-	
		100	
			·
			, , ,
	F 71 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12.	A lorry covered 120km in 2½ hours. A
11.	Given that $n(P) = 5$. Find its number	12.	what aread was it moving?
	of subsets		what speed was it moving?
	of subsets.		
			1
			,
	T .	1.5	

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			circumference of the circle
13.	Solve; <u>2m</u> + 2 = 10	14.	Find the circumference of the circle below. (Use $\pi = \frac{22}{7}$)
	3		below. (635
			14cm
	· ·		
	*		
-			
15.	Work out: 5 + 2	16.	Find the value of y in the diagram
15.	Work out; $\frac{5}{6} + \frac{2}{3}$	10.	below.
	0 3		/
			//-
		× _ 1,,,	5y
			/
			-/
			/130°
_		-	
2			
12			
		,	3.34
			18 11
			15 179 51 54 1
		*	
		1	
17.	Work out; 1 3 2 _{five}	18.	In a bus, there were 30% females and
17.	+1 2 2 _{five}	-	the rest were males. If there were 42
	A CONTRACTOR OF THE CONTRACTOR	8 1,	males, how many people were in the
			bus altogether?
			1.45 × 1.50
. 1			
			4
1			

19.	A shopkeeper bought a crate of soda at	sh. 19	9500 and later sold it at sh. 17500.
	Calculate the loss made.		
-			
20.	The bar graph below shows the number		
	Tuesday in a class of 50 pupils. Use it to		
	12-	(a)	On which day was the highest attendance recorded?
			accordance recorded.
	8 8 M		
	No. of pupils		
	24	(b)	How many pupils were present on
	0	(0)	How many pupils were present on Tuesday?
	Mon Tue		. account
	Days of the week		
,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
	SECTION	.B. (6	00 Marks)
21.	Given that $n(A) = 12$, $n(B \text{ only}) = 8$, $n(A)$	-B)= 7	while $n(A \cup B)^{\prime} = 2$.
(a)	Use the above information to complete	the v	enn diagram below.
	7	(b)	Find n(S)
	N(A) n(B)	(5)	Find $n(\Sigma)$.
	Σ= (7		
-			
1			
Í			
			(5 marks)
l	Consult 2022 T. L. Consult 2022		(5 marks)

22. Given the digits 4, 2, 3. (a) Form all possible three digit numbers that can be formed. (b) What is the probability of forming an even number?
that can be formed. (b) What is sometimed agit numbers even number?
that can be formed.
(F.M.)
(5 Marks
23 (a) Show "a half past two" on the (b) What evening time is shown on the
clockface below.
ctochtace Betovi.
10 2
3
7 6 5
(4 marks
24. Arrange 0.44, 0.4, 4.4 and 4.04 in descending order.
(5 marks)
25. Farouk is 7 years older than Lucky. If their total age is 31 years,
/b\ Uovi old view 600/
(a) How old is Farouk?
(5 marks)

26.	(a) Using a ruler, a pencil and a pair of	comp	asses only, construct triangle	NTV
20.	(a) Using a ruler, a pencil and a pair of	comp	4 4cm	
	where line NT = 7cm, TV = 8cm and line	5 AIA =	0.4011	
	•			
				14
				÷
1, 1				
				-
	(1)			
	(b) Measure angle NTV.			
				.
			·	(5 marks)
27	The sum of 4 consecutive even number	s is 60		
(a)	Find the numbers.	(b)	Expand the largest number	using
			place values.	
		2.0	'	
	· Landa Alba Alba Alba Alba Alba Alba Alba Alb			
		7		(5
20		L .		(5 marks)
28.	Study the shopping list and use it to an			
	2 cups at sh. 16000	(a)	What is the cost of one cup?	
	5 plates at sh. 1500 each			
	6 forks at sh. 500 each		**	
	A saucepan at sh. 1200			
		7-1		
		ľ		
(h)	Haw much manay door and nay for 5 p	latos	6 forks and a series 2	
(b)	How much money does one pay for 5 p	tates,	o forks and a saucepan:	
				(E manula)
				(5 marks)

29.	A company supplied text books to three schools M, N, P and in the ratio of 5:4:6
27.	respectively. If the company supplied 540 text books altogether, how many
	textbooks did each school get?
	(EXCOOKS did cacil school got.
	(6 marks)
-	
30.	(a) Alice was facing in the West. She turned anti-clockwise to face North East.
30.	Through what angle did she turn?
	Illibugit What ariste are site tarm
	이 그는 이 이번 살림에 가지 않아 있다면서 그 나는 사람이 되었다면 생각이 되었다.
	from South
(b)	In which direction will one face if one turns through an angle of 225° from South
()	East in a clockwise direction?
2	
	(4 marks)
	Study the figure below and use it to answer the questions that follow.
31.	Study the figure below and use it to answer the questions that rottow.
J	Work out the area of the shaded part.
	WOLK OUT THE GLOSS
	7m 10m
	7m 10111
	11m
	15m
	15m
	(6 marks)

32.	The pie-chart below shows how Mr. Charles shared sh. 30000 to his three childr		
	Use it to answer the questions that foll	ow.	
		(a)	How much money did Aaron receive?
	Charity Ben $\frac{4}{15}$ $\frac{2}{5}$		
	1/3 Aaron		
(b)	How much more money did Ben receive than Charity?	(c)	Express the amount of money received by Ben in degrees.
		7. 6° 1 2	
*.			
	FN		(5 mark