

Candidate's Examination Number \_\_\_\_\_  
SMZ

**ZANZIBAR EXAMINATIONS COUNCIL**

**FORM ONE ENTRANCE EXAMINATION**

**130**

**MATHEMATICS**

**TIME: 2:30 HOURS**

**SUNDAY, 20<sup>TH</sup> DECEMBER 2020 A.M**

**INSTRUCTIONS TO CANDIDATES**

- 1. This paper consists of TWO (2) sections A and B.**
- 2. Answer ALL questions in section A and any FOUR (4) questions in section B.**
- 3. Write your examination number on each page.**
- 4. Write all answers in the spaces provided.**
- 5. Use a blue or black pen in writing.**
- 6. Cellular phones, calculators and unauthorized materials are not allowed in the examination room.**

<b>FOR EXAMINER'S USE ONLY</b>		
<b>QUESTION NUMBER</b>	<b>MARKS</b>	<b>SIGNATURE</b>
<b>1.</b>		
<b>2.</b>		
<b>3</b>		
<b>4.</b>		
<b>5.</b>		
<b>6.</b>		
<b>7.</b>		
<b>8.</b>		
<b>9.</b>		
<b>10.</b>		
<b>11.</b>		
<b>12.</b>		
<b>13.</b>		
<b>14.</b>		
<b>15.</b>		
<b>16.</b>		
<b>TOTAL</b>		

**This paper consists of 14 printed pages**

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3. Find the value of  $\left(\frac{2}{7} \div \frac{1}{7}\right) \times \left(\frac{1}{4} \div \frac{3}{2}\right) + \frac{5}{84} - \frac{15}{84}$

4. Convert  $281_{10}$  to base 4

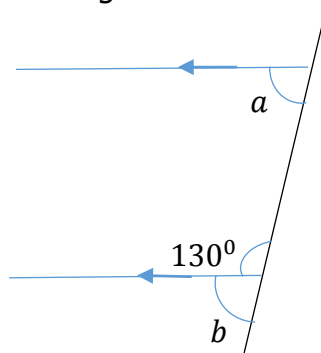
5. A man from Zanzibar has 3000 US dollar and intended to convert them into Tanzania shillings. If 1 US dollar is equal to sh. 2150 TZS. How much does he get in Tanzania shillings?
6. The volume of the cube is  $216 \text{ cm}^3$ . Find the area of its base.

7. Simplify  $\frac{x+2}{6} + \frac{2x-3}{4}$

8. Find the value of  $(+10) \times (-12) + (+7) \times (+4)$ .

9. Convert 19.75% in fraction.

10. Find the value of angles  $a$  and  $b$  in the figure below



**SECTION B: (40 Marks)****Answer ANY FOUR (4) questions in this section.**

11. Look at the calendar and answer the following questions given below.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- Was 2014 an ordinary year or a leap year? Why?
- How many months have 30 days? List them.
- Consider today is 14<sup>th</sup> October 2014 and the examination is supposed to start at 8<sup>th</sup> December. How many days have remained to start the examination?
- Which month has least number of days?

12. a) Ali deposited shs. 300,000 in a saving account at the interest rate of  $7\frac{1}{2}\%$  per annum. After how many years will the interest be *shs.* 45,000?
- b) A car was bought at sh. 4,000,000 and got a loss of sh. 3,000,000. Find the percentage loss.



13. The following table shows the number of patients treated in Mnazi Mmoja hospital in one day:

<b>Diseases</b>	Malaria	Flue	Diarrhoea	Others
<b>Number of the patients</b>	160	20	180	m

- a) If the total number of the patients is 400, find the value of m.
- b) Find the angle representing other diseases.
- c) Show the data by using a pie chart.

14. Look at the numbers in the table below, then write down.

39	24	13
15	81	28
40	11	5

a) Two numbers that add to give 64

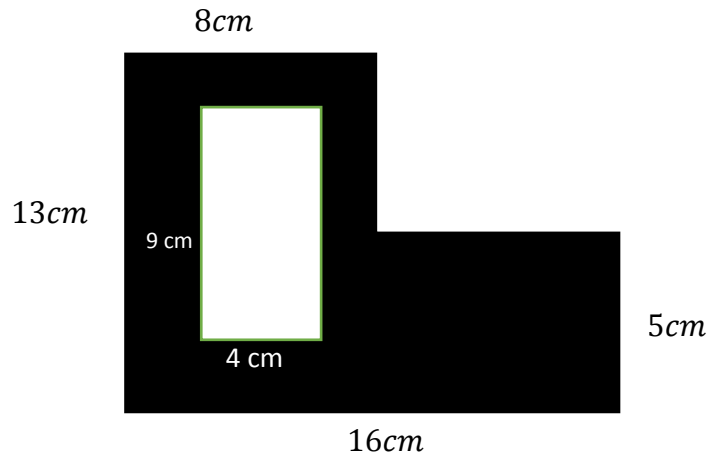
b) Two numbers that differ by 15

c) A perfect square(s)

d) Prime number(s)

e) Even number(s)

15. Find the area of the shaded portion of the shape shown below.

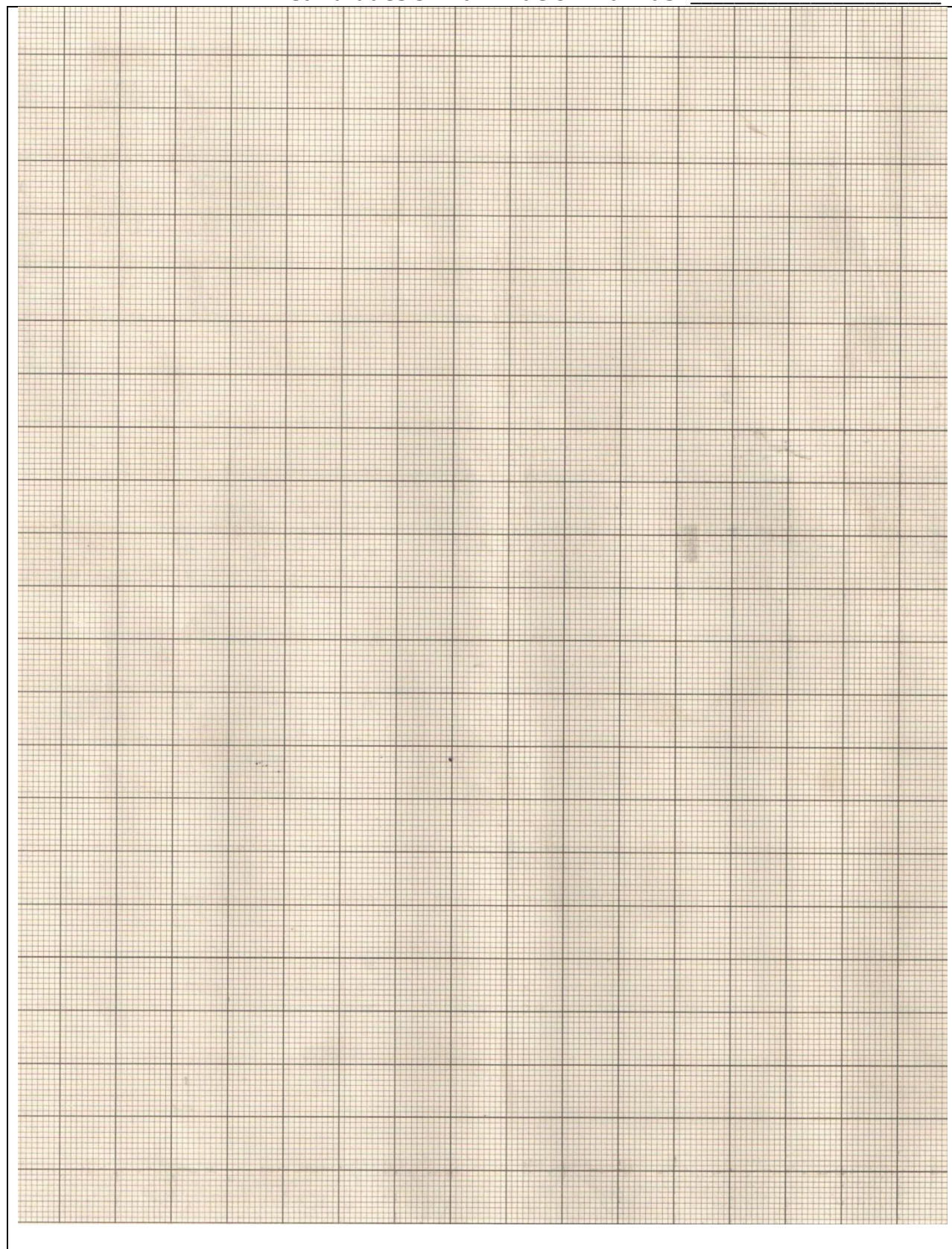


16. The following table shows the masses in kilogram of packets of beans sold by Juma.

Mass of beans in ( <i>kg</i> )	20	25	30	35	40	45
Number of packets of beans	3	8	14	8	4	2

Draw the histogram on the graph paper to display the data.

**Candidate's Examination Number** \_\_\_\_\_



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**ROUGH WORK**