



UGANDA NATIONAL EXAMINATIONS BOARD

**PRIMARY LEAVING EXAMINATION**

2020

**MATHEMATICS**

**Time Allowed: 2 hours 30 minutes**

**Index No.**

Random No.		Personal No.						

**Candidate's Name:** .....

**Candidate's Signature:** .....

**School Random No.** .....

**District ID:**.....

**Read the following instructions carefully:**

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has two sections: **A** and **B**. Section **A** has **20** questions and Section **B** has **12** questions. The paper has **16** printed pages altogether
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **not** be marked.
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to loss of marks.
7. Do not fill anything in the table indicated: "**For Examiners' Use only**" and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn.No.	MARKS	EXR'S NO.
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

## SECTION A: 40 MARKS

Answer **all** questions in this Section  
Questions **1** to **20** carry two marks each

1. Add:  $7\frac{2}{3} + 2\frac{8}{9}$

2. Simplify  $-6 - -4$

3. Write  $3\frac{3}{4}$  in Roman numerals.

4. Change  $\frac{9}{11}$  in to a decimal fraction.

5. Write 9 0 0 9 in words.

.....

.....



6. Workout:  $1\ 1\ 0\ 1_{\text{two}} + 1\ 1_{\text{two}}$

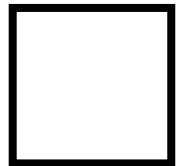
7. If  $B = \{\text{covid 19, corona virus}\}$ . List all the subsets of set B.

8. Solve for x.

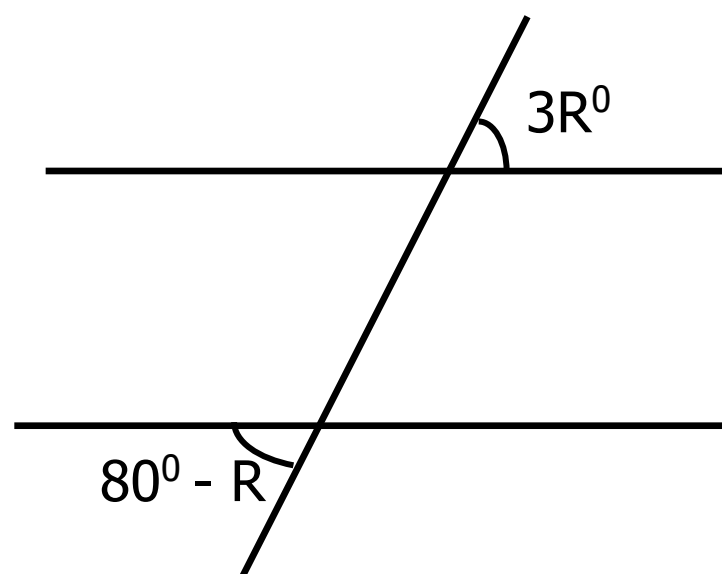
$$2^x \times 2^2 = 32$$

9. Harriet had a jerry can full of sanitizer, she used  $\frac{13}{20}$ . What fraction remained?

10. The probability of passing this Mathematics paper is  $\frac{5}{7}$ , what is the probability of failing it?



11. Find the value of **R** in the figure below.



12. Use distributive property to work out  
 $(33.4 \times 9) - (9 \times 3.4)$

13. Express 12.45 am into a 24hr clock system.

14. Calculate the interior angle sum of a regular polygon whose exterior angle is  $36^\circ$ .

15. If today is Friday, what day of the week was it 45 days ago?



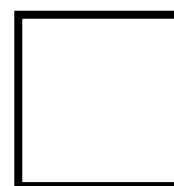
16. Find the next two numbers in the sequence  
1, 8, 27, 64, ....., .....

17. A doctor sold masks at sh: 32,000 making a loss of sh: 3,000. How much had she bought the masks?

18. Find the area of a quadrant of a circle with radius 14cm. (Use  $\pi = \frac{22}{7}$ )

19. In the space provided below, construct an angle of  $75^\circ$ .

20. Find the square root of 256 using Prime factorisation.



## SECTION B: 60 MARKS

Answer **all** questions in this section

Marks for each question are indicated in brackets

21. (a) Using a ruler, pencil and a pair of compasses only, construct a Triangle ABC in which  $AB = 7\text{cm}$ , Angle  $ABC = 105^\circ$  and angle BAC is  $30^\circ$  in the space below.

- (b) Measure the length BC ..... cm

22. (a) Solve:  $2(p - 3) - 6 = 2$



(b) Work out:  $\frac{2y + 1}{3} = \frac{y + 8}{2}$



23. The base area of a cylindrical milk tank is  $1386\text{cm}^2$  and its height is  $100\text{cm}$ .

(a) Calculate its volume.

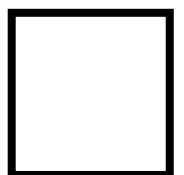
(b) Work out the capacity of the tank when half full of milk.

24. The table below shows marks scored by P.7 pupils in Napak Primary School.

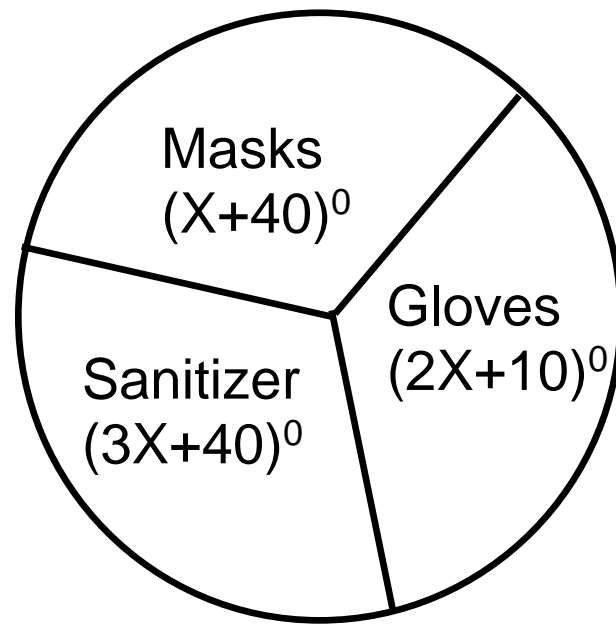
Marks	60	80	50	70
Number of pupils	1	3	K	2

(a) If 10 pupils did the test, find the value of K.

(b) Calculate the mean score.



25. The pie chart below shows the major expenditure of Mr. Kataka's Income for a month in a year 2020.



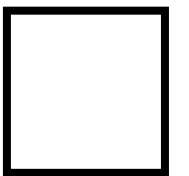
(a) Calculate the value of X.

(b) If he spends sh: 282,000 on masks, how much does Mr. Kataka earn?

26. A taxi left the park at 9:00am and arrived in upcountry at 11:30am travelling at a steady speed of 80km/hr.

(a) Work out the distance travelled.

(b) If the taxi returned using the same route for only  $1\frac{1}{2}$  hours, calculate its average speed for the whole journey.



27. A mother is twice as old as her son. In 5 years time their total age will be 70 years.

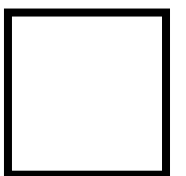
(a) How old is each now?

(b) How old will each be in 5 years time?

28. Evaluate the following

(a) 12% of 240

(b) 35% of sh:720



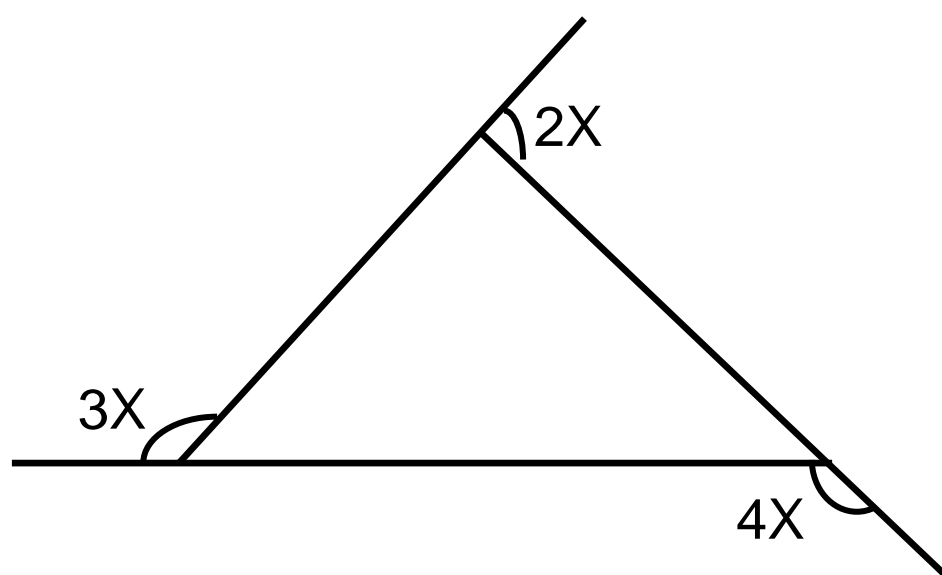
29. Add the following.

(a)  $\frac{1}{4} + \frac{3}{8} + \frac{1}{12}$

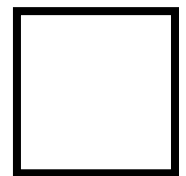
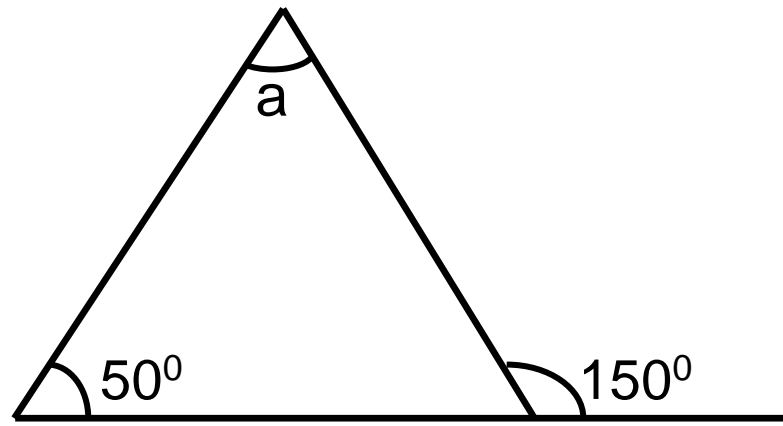
(b)  $3\frac{1}{9} + 1\frac{7}{18}$

(c)  $3 + \frac{1}{9}$

30. (a) Find the value of angle **X**.



(b) Find the size of angle **a**.



31. (a) Tracy borrowed sh:400,000 from Post Bank Uganda which gives an interest rate of  $2\frac{1}{2}\%$  per month for a period of 9 months. How much money will she pay back after the end of the period?

32. (a) Work out  $3 \times 10^{-4}$  using a number line.

(b) Express 0.0078 into scientific notation.

(c) Expand the number shown on the abacus below using powers of ten..

