

# WAKISO CHRISTIAN SCHOOL

## PRE-END TERM 3 EXAMINATIONS 2023

### MATHEMATICS – P.6

*Time Allowed: 2hrs 30min*

Name:.....

#### Read the following instructions carefully:

1. The paper has **two** sections: **A** and **B**
2. Section **A** has 20 short questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions. All answers to both Sections **A** and **B** must be written in the spaces provided.
5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for Examiner's use only.

FOR EXAMINER'S USE ONLY		
Qn. No	MARK	SIGN
1 – 10		
11 – 20		
21 – 22		
23 – 24		
25 - 26		
27- 28		
29 - 30		
31 – 32		
TOTAL		

**Turn over**

## SECTION A: 40 MARKS

1- Workout: 324 minus 213

2- Express CCXCVI as Hindu- Arabic.

3- Simplify:  $^{-}7 - ^{-}3$

4- Find the fifth triangular number.

5- Simplify:  $5m - 2m + 4m$

6- Workout:  $\frac{3}{4} - \frac{2}{3}$

7- Given that Q has 7 proper subsets. Find  $n(Q)$

- 8- Given that the mean of 2, p, 4, 3 and 4 is 4. Find the value of p.
- 9- Using a pair of compasses, ruler and a very sharp pencil only, construct an angle of  $135^\circ$ .
- 10- Convert 2500g into kilogrammes.
- 11- Expand 7.53 using exponents
- 12- An examination which started at 8:40a.m ended after a period of 2hours and 30minutes. At what time did the examination end?

13- Workout  $3^2 \times 9^0$

14- The ratio of blue pens to red pens in a box is 2:3 respectively. If there are 12 red pens in the box, how many pens are in the box altogether?

15- Solve for k:  $\frac{2}{3}k - 4 = 6$

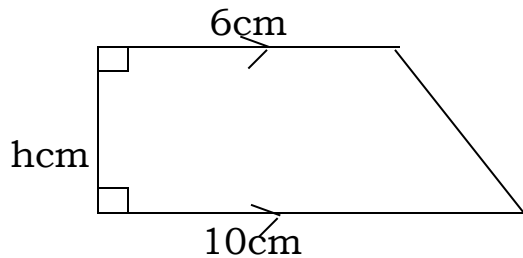
16- A trader sold a watch at sh.35000 making a loss of sh. 5000. At what price did the trader buy the watch?

17- Round off 9.999 to 2 decimal places.

18- Express  $29_{\text{ten}}$  as a quinary base.

19- Find the square root of 64.

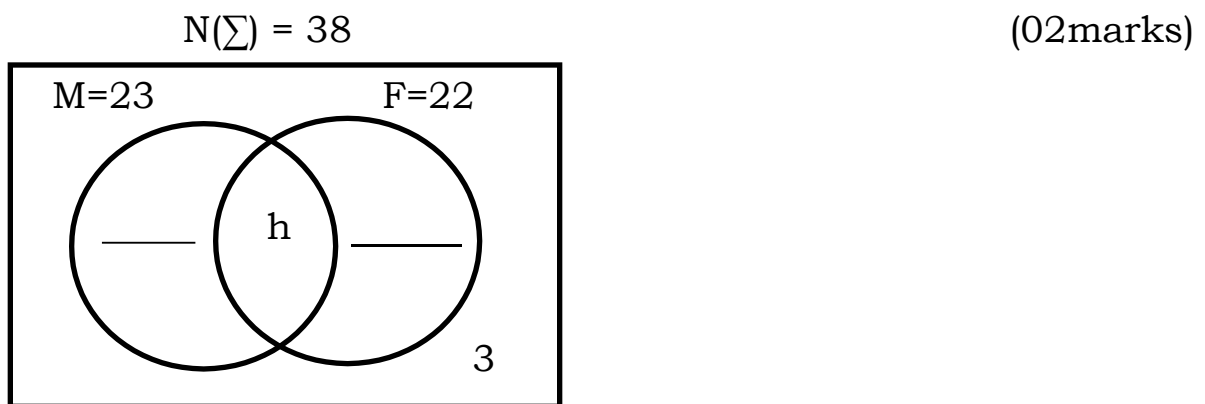
20- The area of the figure below is  $40\text{cm}^2$ . Find its height.



SECTION B: 60 MARKS

21- In a class of 38 pupils, 23 like meat (M), 22 like fish (F),  $h$  like both meat and fish while 3 do not like any of the two.

(a) Use the above information to complete the venn diagram below.



(b) Find the value of  $h$ .

(02marks)

(c) How many pupils like fish only?

(01mark)

22- a) Workout:  $342_{\text{five}} - 24_{\text{five}}$

(02marks)

(b) Give that  $24_k = 14$ . Find the value of k

(03marks)

23- Workout:  $\frac{1.6 + 0.8}{2.5 - 1.7}$

(04marks)

24- The sum of three consecutive natural numbers is 36. If the smallest number is  $k - 2$ .

(a) Find the value of  $k$  (03marks)

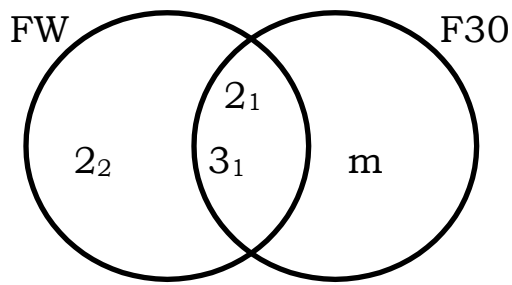
(b) Write the middle number in words. (02marks)

25- A car moved a distance of 225km in 2hours and 30minutes.

(a) Calculate the speed the car was using. (03marks)

(b) If the car moved the same distance using a speed of 45km/hr. How long did the car take to cover the same distance? (02marks)

26- Study the factor diagram below and use it to answer the questions that follow.



(a) Find the value of

(02marks@)

(i) W

(ii) m

(b) Calculate the GCF of W and 30

(01mark)

27- a) Solve for p:  $\frac{2}{3}p - 5 = 7$

(03marks)

(b) Given that  $a = -2$  and  $b = 3$ . Evaluate  $2b - a$

(02marks)



28- Wasswa went to the market and bought the following items;

↗ 1  $\frac{1}{2}$  kg of meat at sh. 16,000/kg

↗ 500g of curry powder at sh. 6,000 per kg.

↗ 3 litres of milk at sh. 1000 per  $\frac{1}{2}$  litre.

↗ 2kg of rice at sh. 9000.

(a) Calculate his total expenditure.

(04marks)

(b) If Wasswa went with one note and remained with sh. 8000, which note did he go with?

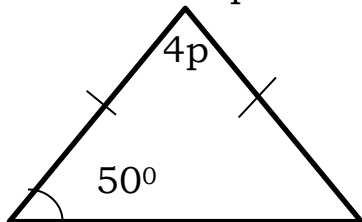
(02marks)

29- a) Given that  $m$  and  $72^\circ$  are complementary angles, find the value of  $m$

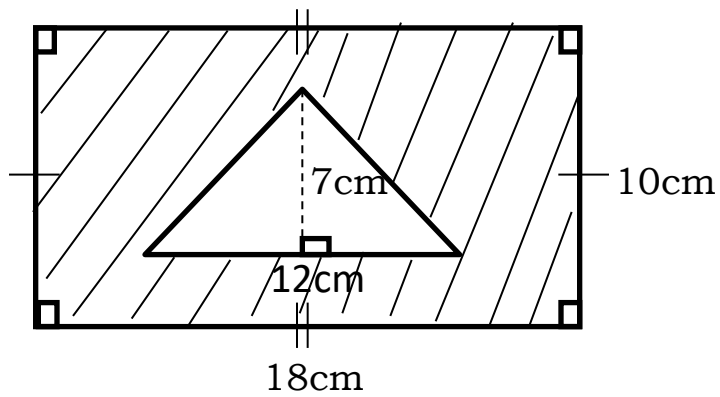
(02marks)

(b) Find the value of  $p$  in the figure below in degrees.

(03marks)



30- Study the figure below carefully and use it to answer the questions that follow.



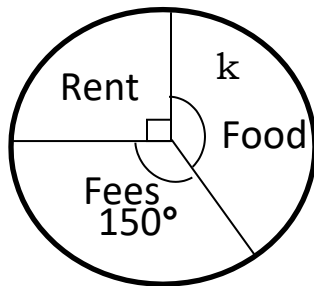
(a) Find the area of the outer figure. (02marks)

(b) Calculate the area of the inner figure. (02marks)

(c) Find the area of the shaded region. (02marks)

31- Using a pair of compasses, ruler and a sharp pencil only, construct an equilateral triangle in a circle of radius 3cm. (04marks)

32- The pie-chart below shows how Mr. Lubwama spends his monthly salary.



(a) Find the value of k in degrees.

(02marks)

(b) If he spends sh.48,000 on food, calculate Mr. Lubwama's monthly salary.

(03marks)

**END**