MASAKA UNITED SCHOOLS ACADEMIC BOARD (MUSAB)

PRIMARY SEVEN SPECIAL MOCK EXAMINATION– 2022

MATHEMATICS

Time: 2hours 30 minutes

School: _____

EMIS No.						Personal No.		

Candidate's Name: _____

Candidate's Signature: _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

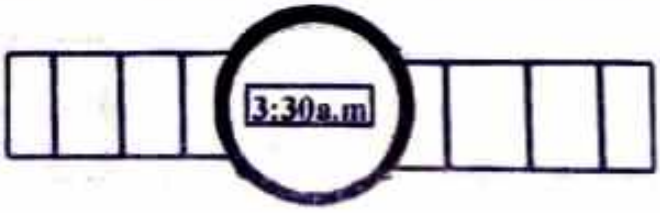
READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. This paper has two sections A and B.
2. Section A, has 20 short questions (40mks)
3. Section B has 12 questions (60marks)
4. Answer all questions.
5. All answers to all questions must be written in the space provided.
6. All answers must be written using **blue** or ***black*** ball pen or ***ink***.
7. Unnecessary crossing of work will lead to loss of marks.
8. Any handwriting that cannot easily be read may lead to loss of marks.
9. Do not fill anything in the boxes indicated **"FOR EXAMINER'S USE ONLY"**

FOR EXAMINER'S USE ONLY		
QN. No.	MARKS	INITIALS
1 - 5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-28		
29-30		
31-32		
TOTAL		

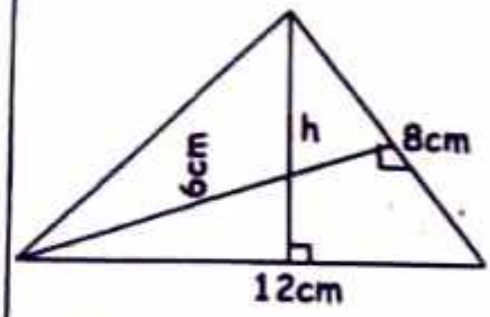
Turn O

SECTION: A

	Workout: 21 x 3	2.	Write "Forty seven thousand, nine hundred eighty" in figures.
	Given that; Set P = { All factors of 18 }. Find n(P)	4.	Find the next two numbers in the sequence. $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \_\_\_\_\_, \_\_\_\_\_$
5.	The number of pupils in a school reduced by 25%. If the original number of pupils was 1,800. Find the current number of pupils in the school.	6.	Express $\frac{3}{8}$ as a decimal fraction
7.	Write the time shown on the watch in words. 		

8. Bisect the obtuse angle on the diagram below.

9. Using the diagram below, calculate the value of h.



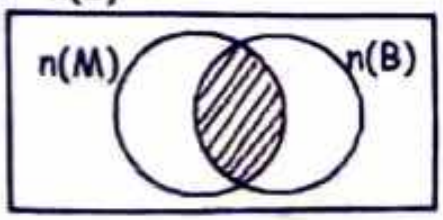
10. What is the multiplicative inverse of $\frac{2}{5}$?

11. Given that 4 apples cost sh. 2,000. Find how many apples can one buy with sh. 6,000.

12. Given that $y = -4$, $k=5$ and $q = 2$

Evaluate: $k - yq^2$

13. Describe the unshaded part in the Venn diagram below.



14.	If $\frac{2}{3}$ of land was cleared for banana plantation, and 120 hectares was left for crop growing. How many hectares were they altogether?
15.	Prime factorise 36 and write your answer in exponents.
16.	How many 250ml bottles of juice can one get from 2 litres of the same juice?
17.	Round off 12.649 to the nearest whole number.

18.	A regular polygon has 12 right angles. How many sides has the polygon?
19.	A driver left Kampala to Masaka with 8 passengers. When he reached Mpigi two passangers left the taxi and 4 passengers boarded from Lukaya. Find how many passengers reached Masaka.
20.	Find the range of -2, 0, -4, and -5.

SECTION: B

21. Shirat went to the market with 3 -ten thousand shilling notes and bought the items as shown on the table.

(a) Study it carefully and complete it.

Item	Unit cost	Quantity	Amount
Rice	_____	2kg	Shs. 7000
Beans	Shs. 3,000	2 ½ kg	Shs. _____
Maize flour	Shs. 2,500	_____	Shs. 7,500
Cooking oil	Shs. 12,000	_____ litres	Shs. 6,000
	TOTAL		_____

(5marks)

(b) Calculate how much Shirat paid for the items if she was given a discount of sh.8,000.

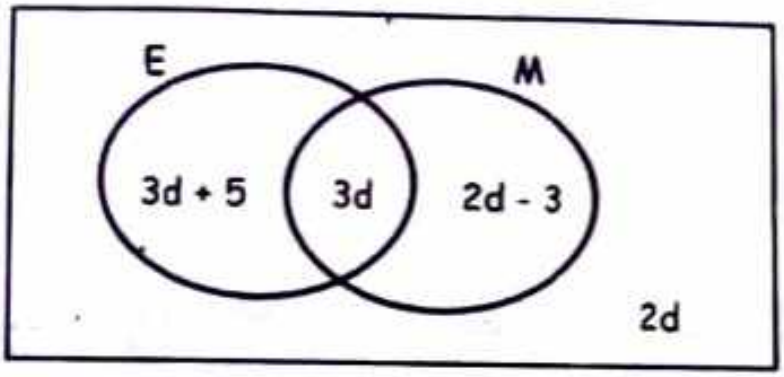
(1mark)

22. In a security training, bullets are shoot at an interval of 50 minutes and 75 minutes respectively.

(a) After how many hours will they shoot together? **(3marks)**

22. (b) If the last shoot together at 8:15pm. At what time before were they shoot together? **(2marks)**

23. The Venn diagram below shows the number of tourists who visited Entebbe airport (E) and Uganda Museum (M). Use it to answer the questions that follow.



(a) If 20 tourists did not visit Uganda Museum. Calculate the value of d. **(3marks)**

(b) Find the number of tourists who visited the two places. **(2marks)**

24. a) Using a pair of compasses, a ruler, a sharp pencil. Construct a triangle EHT such that $\overline{HE}$ = 8cm, $< HET = 60^{o}$ and $< EHT\ 30^{o}$

(4mrks)

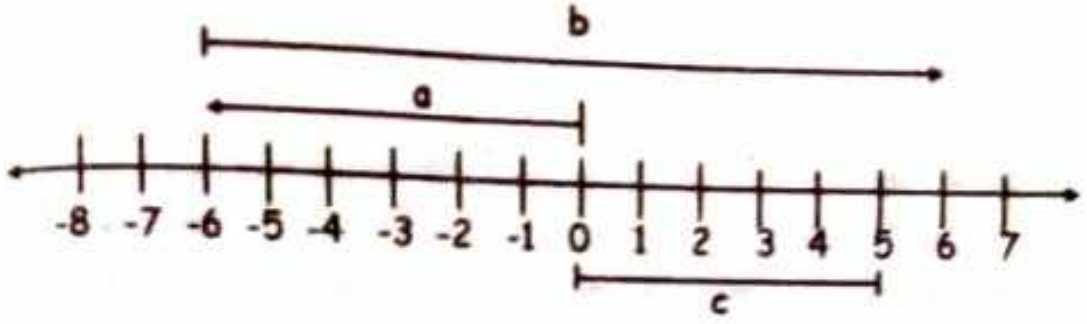
(b) Drop a perpendicular from T to meet HE at B. Measure TB _____

(1mark)

25. Barbra, Rose, Gorreth and Merisha are pupils of P.7 whose average weight is 47kg. Merisha weighs 52kg and she is as heavy as Barbra. Gorreth is 4kg less than Barbra.
Find Rose's weight.

(5mrks)

26. Study the number line below carefully and use it to answer the questions below.

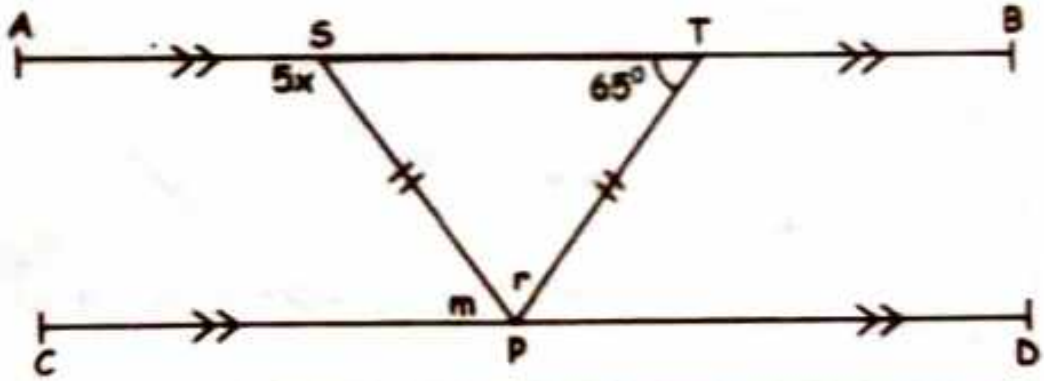


(a) Write the integers for the arrows shown. **(1mark each)**

a _____ b _____ c _____

(b) Write down the mathematical statement using the number line above. **(2marks)**

27. Given that line AB is parallel to line CD. Angle PTS = 65^0 as shown on the the diagram below.



Find the value of: **(2marks)**

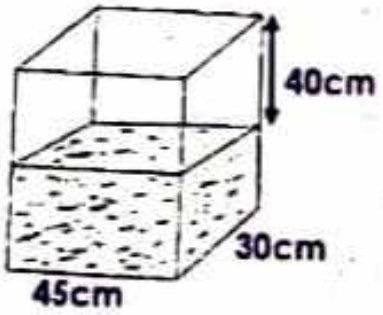
(i) X

(ii) r **(2marks)**

27. (iii) m (1mark)

28. A taxi driver leaves station Masaka at 9:45am and reaches Kampala station at 2:15pm. The distance between the two stations is 180km. Calculate the average speed of the taxi driver in kilometers per hour. (4mrks)

29. The diagram below shows a rectangular tank a farmer uses to collect his milk from the cows.



a) If the tank now is $\frac{1}{3}$ full of milk. Find the height of the full tank. (2mrks)

b) How many litres of milk are in the tank now? (3mrks)

30. (a) Workout:

$$\frac{0.7 - 0.34}{0.2 \times 0.3}$$

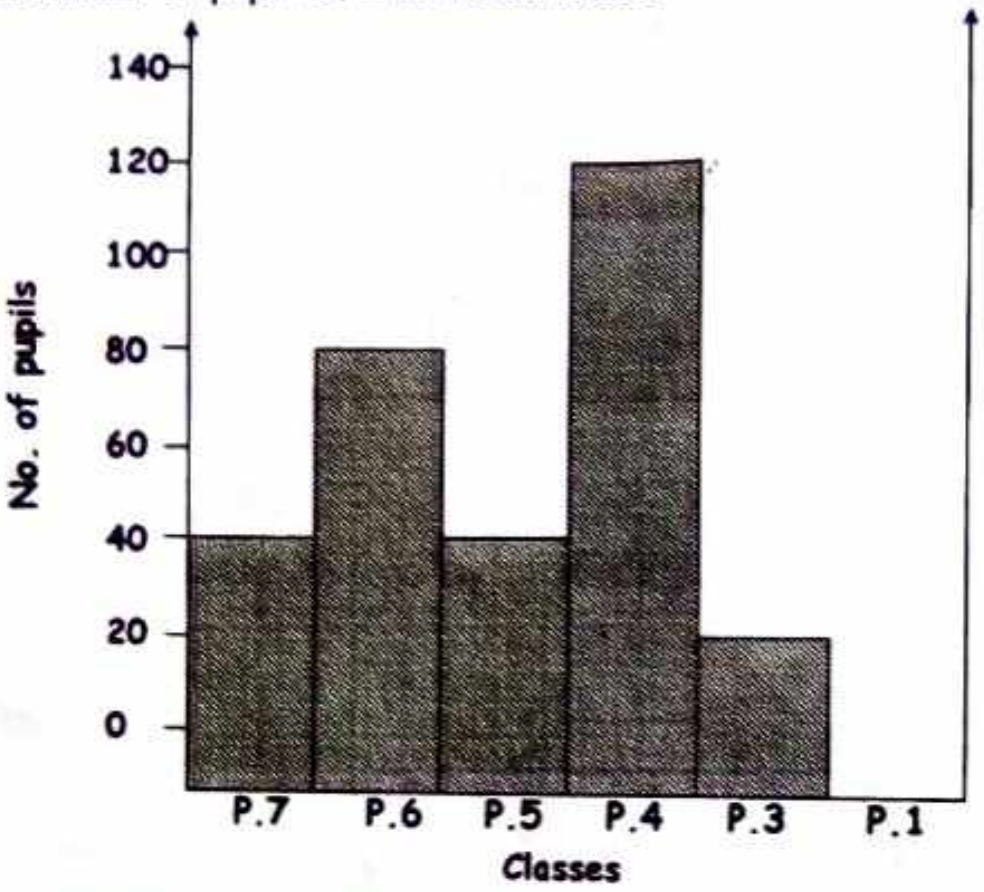
(3marks)

(b) Simplify: $\frac{1}{4} + \frac{5}{8} \div \frac{1}{2}$ (2marks)

31. a) Solve for x: $3(3x - 3) - 2(2x - 2) = 15$ (3mrks)

b) Given that the height of Peter is five times that of Mary. If the difference of their heights is 20cm. Find Mary's height. (2mrks)

2. The graph below shows the number of pupils who were not immunised against COVID-19 in a certain school recorded from five classes with equal number of pupils of 140 in each class.



(a) In which class was the highest number of pupils immunized? (1mk)

(b) Find how many pupils were immunized in P.4. (2marks)

(c) Find the total number of pupils who were not immunized in the 5 classes. (2marks)

THE END