THE REPUBLIC OF UGANDA

TAAND EXAMINATIONS BOARD

PRE-PRIMARY LEAVING EXAMINATION, 2024

MATHEMATICS (SPECIAL PAPER)

Time Allowed: 2 hours 30 minutes

Random Number						Personal Number		

Candidate's Name: .....

Candidate's Signature.....

School Name:.....

District:.....

Read the following instructions carefully:

1. This paper is made up of **two** Sections: **A** and **B.**
2. Section **A**, has **20** short-answer questions **(40 marks)** and Section **B** has **12** questions **(60 marks)**
3. **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 fountain pen. Only diagrams should be done in pencil.
5. No calculators are allowed in the examination room.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. Do not fill anything in the boxes inclicated **"For examiners' use only"**

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

© Printed by UDA Kampala Tel: 0701 - 616 861 / 0772 - 834543

Turn Over

SECTION A: (40 Marks)

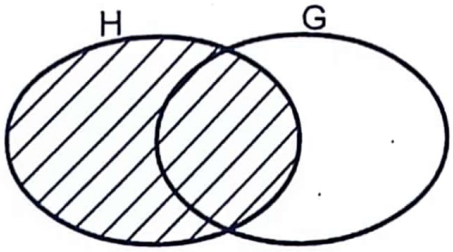
Answer all questions in section A. Each question carries 2 marks.

1. Work out:

$$\begin{array}{r} 2\ \ 2 \\ \times\ \ 3 \\ \hline \\ \hline \end{array}$$

2. Find the value of 7 if its place value in a number is thousands.

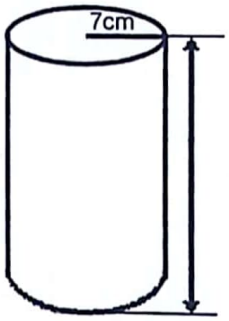
3. Describe the shaded region in the Venn diagram.



4. Simplify: $^{-}2 + {}^{-}3 =$

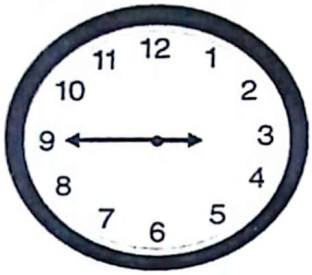
5. A pupil slept at 8:16p.m and woke up at 6:30a.m. Find how long was the pupil asleep?

6. The capacity of the tank below is 10.8 litres of water. Find the capacity of the tank in mililitres?



7. Work out: $53 - 15 \div 5 =$

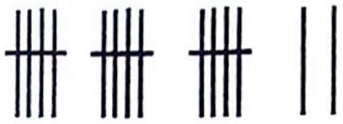
8. Write down the time shown on the clock face below.



9. The temperature on a top of mountain Rwenzori in the morning is $^{-}11^{0}C$, at midday the temperature rose to $8^{0}C$. Calculate the temperature range.

10. Prime factorise 36.

11. Write the number represented by the tallies below.



12. Find the least value of p in a three digit number 31p so that it is divisible by 6.

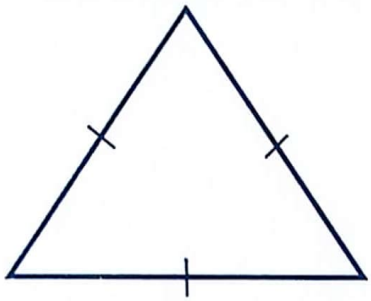
13. Using a ruler, a pencil and a pair of compasses only.
Construct an angle of 135^{0}.

14. Simplify:
$6p + n + 5p - 3n$

15. Write 409 in Roman numerals.

16. In a P.7 classs of a certain school there are of 40 candidates. The probability of picking a candidate to get a mathematics textbook is $\frac{2}{5}$. How many candidates do not get a mathematics text book?

17. Find the number of lines of folding symmetry in the figure.



18. The mass of a packet of biscuits is 1.5kg. Find the mass of the packet of biscuits in grammes.

19. 28% of the farmer's total produce is maize grains. The rest of the produce is millet grains. If there are 7200kg of millet grains, how much total produce does the farmer have altogether?

20. Change 22_{ten} to base three.

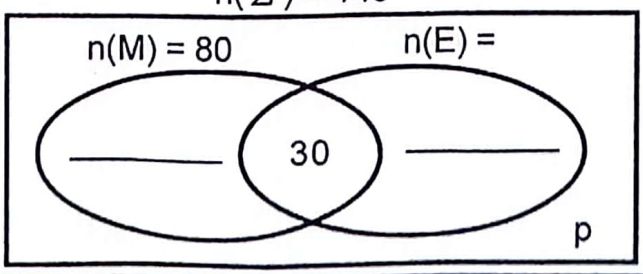
SECTION B: (60 Marks)

21.(a) 7 men can build a house in 9 days, how many, more men can build the same house working at the same rate in 3 days? *(3marks)*

(b) Simplify: $12\frac{1}{2}\%$ of sh.8000. *(2marks)*

22. (a) In a P.7 class of a certain school, there are 140 candidates, 80 candidates like Mathematics, the number of candidates who like English is twice those who like none of the two subjects and 'p' candidates like neither subjects. Use the information to complete the venn diagram below. *(2mark)*

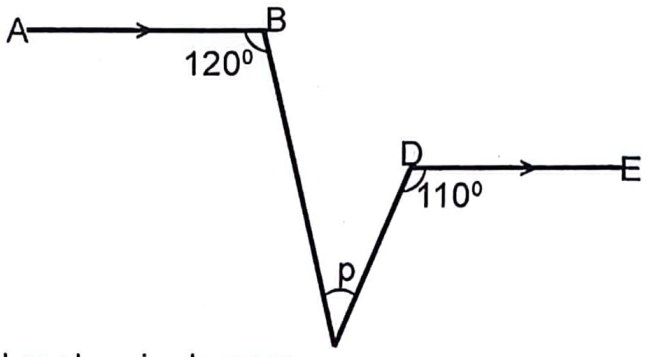
$n(\Sigma) = 140$



(b) Find the value of p. *(2marks)*

(c) Calculate the number of candidates who like English only. *(2marks)*

23. In the diagram below, AB is parallel to DE. Study it and answer the questions below.



(a) Find angle p in degrees. *(4marks)*

(b) Name the special angle p. *(1mark)*

24.(a) Simplify: $\frac{0.3 - 0.06}{0.7 + 0.5}$ *(3marks,*

(b) Reduce 4800kg in the ratio of 2:3. *(2marks)*

25. Using a ruler, a pencil and a pair of compasses only, construct a kite PQRT in which diagonal PR = 7cm. Diagonal QS bisects PR at O such that QO = 4cm and SO = 6cm. *(5marks)*

26. Trust Africa Bank bought and sold foreign currencies in Uganda shillings (Ug shs) on a certain day as shown in the table below. Study the table and use it to answer the questions below.

Currency	Buying in (Ug sh)	Selling in (Ug sh)
1 US dollar	3900	3950
1 Rwandese Franc	5	9
1 British Pounding (£)	4800	4900

(a) A tourist had £220 and exchanged them into Uganda shillings. Find the amount of money in Uganda shillings the tourist got. *(2marks)*

(b) Another tourist came with 100US dollars and 500 Rwandese Franc. How much money in Uganda shillings did the tourist have? *(3marks)*

27 The table below shows the mass of different pupils measured in a P.7 class. Use it to answer questions below.

Mass in kg	35	45	50	66
Number of pupils	8	4	3	5

(a) How many pupils were measured? *(1mark)*

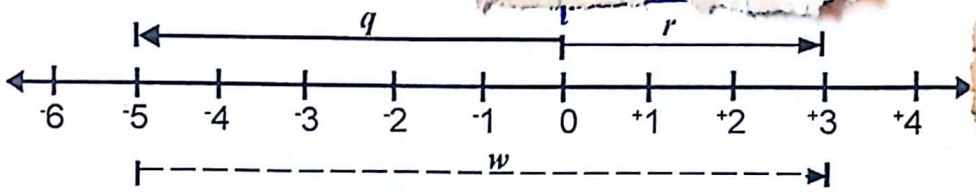
(b) Find the median mass in kg. *(2marks)*

(c) Calculate the average mass of measurements. *(3marks)*

28.(a) Work out: 3 - 5 = _____ (finite 7) *(2marks)*

(b) Today is Monday, calculate the day of the week that will be 49 days from now. *(2marks)*

29. ***Study the numberline below carefull... answer the questions that follow.***



(a) Name the integers indicated by the arrows. *(1mark each)*

q = _____

r = _____

w = _____

(b) Write the mathematical statement for the numberline. *(1mark)*

30. A car left town Q at 8:30am to town P 240km away moving at a speed of 60km/hr. It then returned to town Q at a speed of 30km/hr.

(a) Work out the time at which the car reached town P. *(2marks)*

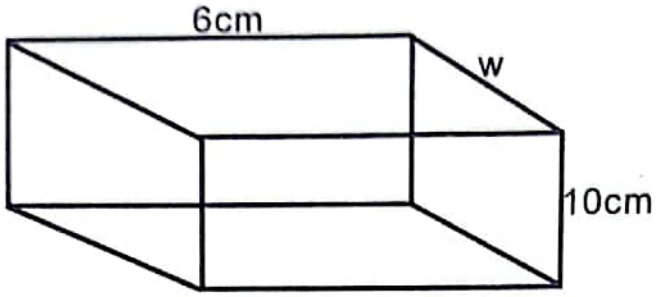
(b) Calculate the average speed of the driver for the whole journey back home to town Q. *(3marks)*

31.(a) Solve for y. *(3marks)*

$7(3y - 1) - 4(y - 1) = 31.$

(b) The mother is 20 years older than the son now. In 15 years time a mother will be twice as old as the son. How old is the mother in 15 years time if the son is y years old now? *(3marks)*

32. **Study the figure and answer the questions below.**



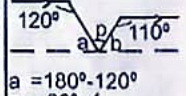
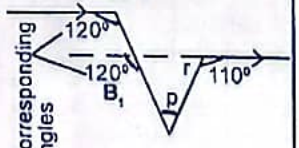
(a) The base area of the figure above is $30cm^2$. Calculate its width. ***(2marks)***

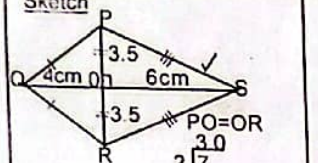
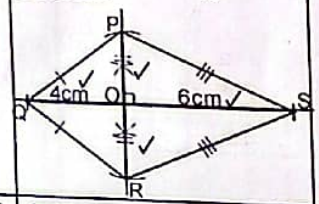
(b) Work out its volume. ***(2marks)***

END

AAND P.7 MTC PRE-PLE SPECIAL PAPER MARKING GUIDE, 2024

N	SOLUTIONS	MKS	COMMENT
	SECTION A:(40 MARKS)		
	2 2 x 3 6 6✓	B_2	On sight
	Value = Digit x Place value Value = 7 x 1000✓ Value = 7000✓	M_1 A_1	Follow through
3	Set H	B_2	On sight
4	2 + 3 2 - 3 = 5	M_1 A_1	Follow through Accept use of number line.
5	Started ⟶ 8.16pm Ended ⟶ 6:30pm Old day Hrs Min 12 00 8 16 3 44 = 3hrs 44mins✓ Total time Hrs Min 3 44 +6 30 10 14 = 10hrs 14mins✓	B_1 B_1	Follow through
6	KL HL DL (L) dL cL ml 1 0 0 0 1L = 1000mL✓ 10.8L = $\left(\frac{108}{10}\times 1000\right)$mL = 10800mL✓	M_1 A_1	Follow through
7	53 - 15÷5 BODMAS 53 - (15÷5)✓ 53 - 3 = 50✓	M_1 A_1	Follow through
8	8:45 o'clock✓ OR: 15 minutes to 9✓o'clock = 45minutes past 8✓o'clock	B_2	On sight
9	Range = H - L Range = 8 - 11✓ Range = 8 + 11 Range = 19✓	M_1 A_1	Follow through
10	2|36 = 2x2x3x3 2|18 OR 3|9 $2_1x2_2x3_1x3_2$ 3|3 OR 1 2^2x3^2✓	M_1 A_1	Follow through Accept use of factor trees.
11	5+5+5+2 = 17 OR (3x5)+2 15+2 = 17✓	B_2	On sight
12	digits 0,1,2,3,4,5,6,7,8,9 31p 310 = Divisible by 2 but not 3 311 = Not divisible by 2 or 3 312 = Divisible by 2 both 2 and 3 and 6 m = 2✓	B_1 B_1	Follow through
13.	 135° ✓	B_2	Follow through
14	6p+n+5p-3n 6p+5p+n-3n✓ 11p-2n	B_1 B_1	Follow through
15	409 = 400+9✓ = CD + IX = CDIX✓	M_1 A_1	Follow through
16	Get text books = $\frac{2}{5}$ Didnt get = $\frac{5}{5}-\frac{2}{5}=\frac{3}{5}$✓ No of candidates = $\frac{3}{\cancel{5}_1}\times\frac{\cancel{40}^8}{1}$ = 24 candidates✓	M_1 A_1	Follow through
17	 = 3lines of folding symmetry✓	B_1 B_1	Award for representing the lines on shape. On sight.
18	1kg = 1000g 1.5kg = (1.5x1000)g✓ = $\left(\frac{15}{10}\times 1000\right)$g = 1500g✓	M_1 A_1	Follow through

QN	SOLUTIONS	MKS	COMMENT
19.	Maize grain = 28% Millet grains = 100%-28% = 72%✓ $\frac{72}{100}$ ⟶ 7200kg 72 parts represent 7200kg 1 part represents $\frac{7200kg}{72}$ = 100kg Total produce = 100parts 100parts = 100x100kg = 10000kg✓	B_1 B_1	Follow through
	OR: Let the total produce be c $\frac{72}{100}$xc = 7200kg✓ $\frac{72c}{72} = \frac{7200kg\times 100}{72}$ c = 10000kg✓	M_1 A_1	
20.	Base | Number | Rem 3 | 22 | 1 3 | 7 | 1 3 | 2 | 2 0 = 211_{three}✓	M_1 A_1	Follow through
21. (a)	**SECTION B: (60 MARKS** 9days ⟶ 7 men 1 day ⟶ (9x7)men 3 days ⟶ $\frac{3}{\cancel{9}_3}\times 7$ men✓ = 21 men✓ In 3 days = (21-7)men = 14 more men✓	M_1 A_1 B_1	Follow through
(b)	$12\frac{1}{2}$% of sh.8000 $\frac{25}{2}$% x sh.8000 $\frac{25}{2\cancel{00}_1}\times\frac{\cancel{8000}^{40}}{1}$✓ = sh.1000✓	M_1 A_1	Follow through
22. (a)	n(Σ) =140 n(M)=80 n(E)=2P 80-30 30 2P-30 P	B_1 B_1	On sight award
(b)	p+2p-30+30+50 = 140✓ 3p+50 = 140 3p+50-50 = 140-50 $\frac{3p}{3}$ = $\frac{90}{3}$ p = 30✓	M_1 A_1	Follow through
(c)	2p-30 (2xp) - 30✓ (2x30) - 30 60-30 = 30 candidates.✓	M_1 A_1	Follow through
23. (a)	 a =180°-120° a = 60°✓ b =180°-110° b = 70°✓ p + a + b = 180°✓ p + 60° + 70° = 180° p + 130° - 130° = 180° - 130° = 50°✓	B_1 B_1 M_1 A_1	Follow through
	OR:  Corresponding angles 120° 120° B_1 r 110° p r =180°-110° = 70° p + r = 120°✓ p + 70° = 120° p + 70° - 70° = 120° - 70° p = 50°✓	B_1 B_1 M_1 A_1	Follow through for any other appropriate methods.
(b)	p = an acute angle.✓	B_1	On sight
24. (a)	(0.3-0.06)÷(0.7+0.5) 210 0.30 0.7 -0.06 +0.5 0.24✓ 1.2✓		

QN	SOLUTIONS	MKS	COMMENT
	0 24 ÷ 1 2 = 24 ÷ 12 100 10 ✓ 24 x 10 = 2 100 12 10 = 0.2 ✓	M1 M1 A1	Follow through
(b)	Smaller x Quantity Bigger = 2 x 4800kg ✓ 5 = 3200kg ✓	M1 A1	Follow through
25	Sketch  PO=OR 2 | 7 3.0 -6 =3.5cm 10 Accurate:  	S1 L1 L1 L1 L1	Follow through
26. (a)	1 pound = UG sh.4800 220 pounds = 220xUGsh.4800 = UGsh.4800 x 220 ✓ 0000 9600 9600 UGsh.1,056,000 ✓	M1 A1	Follow through
(b)	1USdollar=UGsh.3900 100USdollar=100xUGsh.3900 = UGsh.390000 ✓ 1Rwanda Franc = UGsh.5 500 Rwanda Franc = UGsh(500x5) = UGsh.2500 ✓ Total UGsh: = 390,000 + 2,500 UGsh.392,500 ✓	B1 B1 B1	Follow through
27(a)	(8+4+3+5)pupils=20pupils ✓	B1	On sight
(b)	Median 35,35,35,35,35,35,35,35,45,45,45,50,50,50,55,55,55,55,55,55 = (45+45)÷2 = 90÷2 = 45 ✓	M1 A1	Follow through
(c)	Mean = (35x8)+(45x4)+(50x3)+(6x5) / 20 ✓ Mean = 280+180+150+330 / 20 Mean = 940/20 = 47 ✓	M1 M1 A1	Follow through carefully
28 (a)	3-5 = —— (finite 7) (3+7)-5 —— (finite 7) 10-5 = 5 3-5 = 5 —— (finite 7)	M1 A1	Follow through
(b)	S M T W T F S 0 1 2 3 4 5 6 Monday + 49 = —— (finite7) 1 + 49 = —— (finite 7) 50 7 = 7 Rem 1 It will be a Monday.	M1 A1	Follow through
29 (a)	q = ·5 r = ·3 w = ·8	B1 B1 B1	On sight
(b)	r - q = w = ·3 - ·5 = ·8	B1	On sight

QN	SOLUTIONS	MKS	COMMENT
30. (a)	T = D/S = 240km / 60km/hr = 4hrs ✓ Hrs Min 8 30 +4 00 ✓ 12 30 = 12 30pm	B1 B1	Follow through
(b)	Time for returning T = D/S = 240km / 30km/hr = 8hrs ✓ AS = TD/TT = (240+240)km / (4+8)hrs ✓ = 480/12 km = 40km/hr ✓	B1 M1 A1	Follow through carefully.
31. (a)	7(3y-1) - 4(y-1) = 31 21y-7 - 4y+4 = 31 21y-4y - 7+4 = 31 17y - 3 = 31 17y - 3+3 = 31+3 17y/17 = 34²/17₁ y = 2	M1 M1 A1	Follow through
(b)	2(y+15) = y+35 ✓ 2y+30 = y+35 2y+30-30 = y+35-30 2y = y+5 2y-y = y-y+5 y = 5years ✓ y+35 years 5+35 years = 40 years ✓	M1 A1 B1	Follow through
32. (a)	L x W = Base area 6cm x w = 30cm² ✓ 6wcm/6cm = 30cm²/6cm w = 5cm ✓	M1 A1	Follow through
(b)	V = L x W x H V = 6cm x 5cm x 10cm ✓ V = 300cm³ ✓	M1 A1	Follow through

END