VICTORY STEP EDUCATION SERVICES

PRIMARY LEAVING EXAMINATION BOARD

SUPER MAGIC SET ONE

2022

MATHEMATICS

Time allowed 2hrs 30 minutes

Index No			Personal No.				

CANDIDATE'SNAME.....

SIGNATURE.....

SCHOOL NAME.....

DISTRICT NAME.....

Read the following instructions carefully

1.This paper has two Sections Aand B

2.Section A has 20 Questions (40marks) and section B has 12 questions(60marks).

3.Attempt all questions in both section A And B.All questions must be written in the spaces provided

4.All answers must be written using blue or black ball pen or ink. Only diagrams should be drawn using a pencil

5.Unnecessary changes of work may lead to loss of marks

6.Do not fill anything in the box with "**EXAMINER'S USE ONLY"**

7.All handwriting that cannot easily be read may lead to loss of marks.

8.Calculators are not allowed inside.

FOR EXAMINER'S USE ONLY

Qn. No	MARK	EXR'S NO
1 – 5		
6 – 10		
11 - 15		
16 – 20		
21 - 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 - 32		
Total		

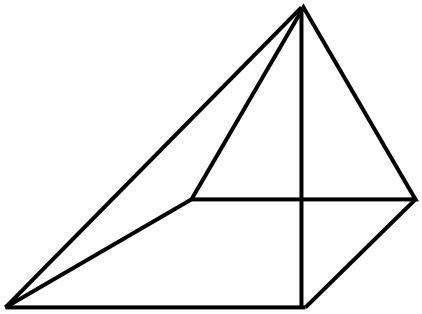
SECTION A

All questions in this section carry 2marks each

1. Divide: 35 ÷ 7

2. Find the value of 8 in 2 8 9 6 7

3. The figure below is a pyramid.



a) How many faces does it have?

b) Find its number of edges.

4. Simplify 3a – a – b + a + 2b.

5. Find the next number in the sequence 0, 4, 10, 18, 28, ____

6. Express 28,000 in scientific notation.

7. With the help of a protractor, draw an angle of 65^0 in the space provided below.

8. The medium of 5 consecutive integers is -2. Find the range

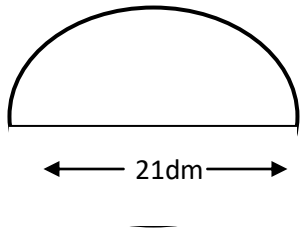
9. Express 20cm as a percentage of 2metres.

10. Write in numerals. Twenty eight thousand nine hundred four.

11. A car uses 3 litres of petrol to travel 12km. How many litres are required to travel a distance of 60km?

12. In the space below, draw a venn diagram to show that AnB = A

13. Find the total distance round the figure below.



14. After covering $\frac{3}{8}$ of the journey, Joseph had 40km left. How long was the journey?

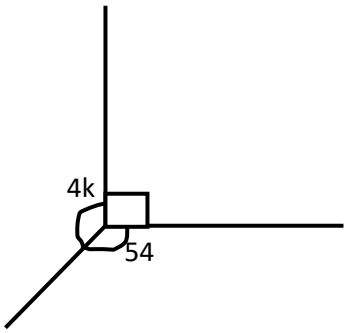
15. A bag contains 8 red pens and 7 blue pens. Find the probability of picking a red pen from the bag at random.

16. Simplify: $\frac{1\ 2\ a^2\ b^3}{4\ a\ b}$

17. Find the value of the unknown base: $24_p = 42_{\textbf{five}}$

18. The ratio of boys to girls in class is 5:8 respectively. If there are 12 more girls than boys. Find the total number of pupils in the class.

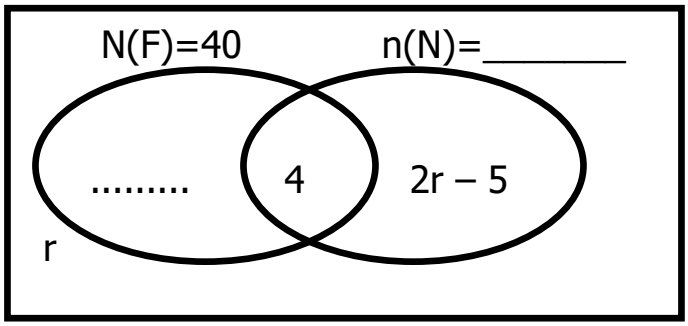
19. In the figure below, calculate the value of k in degrees.



20. Work out using the distributive property
(4.5 x 148) + (152 x 4.5)

SECTION B

21.The diagram below shows the number of players in a school team who participated in football(F) ,Netball (N) and other games. Complete the venn diagram



b)If 37 players did not participate in football,find the value of r.

c) If a player is selected at random to be a team captain,what is the probability that the one selected participated in netball?

22. A school basar in Rwebikoona Primary school withdrew some amount of money from Centenary bank and the cashier gave him otes and coins as follows.

8 fifty thousand shilling notes

6 twentythousand shilling notes

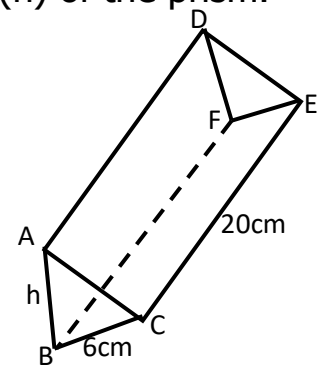
12 five hundred shilling coins

a) How much money did he withdraw altogether

b) If he asked for two thousand shilling notes , how many notes would he get for all the amount of money withdrawn?

23. The volume of the triangular prism below is $480cm^3$.

a) Calculate the height (h) of the prism.



b) Find the length of AC.

c) Work out the total surface area of the prism.

24. Solve and write the solution set: $3x \leq 12$

b) A father distributed 32 books to his children as follows. Andrew got three times as much as Ben and Charles got three books less than Andrew.

How many books did Andrew get?

25. With the help of a ruler, pencil and a pair of compasses only, construct a rhombus PQRS such that diagonal PR = 8cm and diagonal QS = 6cm.

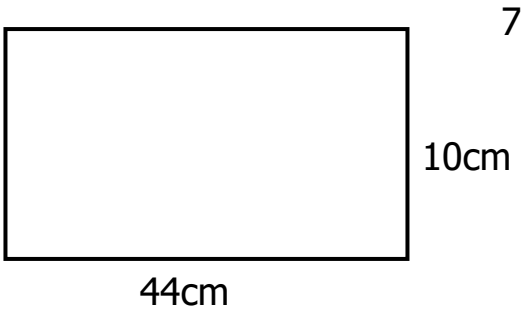
b) Measure the length PQ.

26. A motorist drove from town A at a steady speed of 48km/hr to town B for 2hours 20minutes. He then continued to town C driving at 50km/hr for 2hours.

a) How far is town B from town A?

b) Calculate the average speed of the motorist for the whole journey.

27. The figure below shows a rectangular sheet of metal which is to be folded to form a hollow cylinder. ($\pi = \frac{22}{7}$)



a) Calculate the radius of the cylinder.

b) Work out the volume of the cylinder formed.

28. Evaluate: $\frac{0.45 \times 0.6}{0.9 \times 0.05}$

b) Simplify : $\frac{1}{2} - \frac{1}{3} + \frac{1}{4}$

29. In an English test given to a P.7 class, the marks frequency and total marks are shown in the table below.

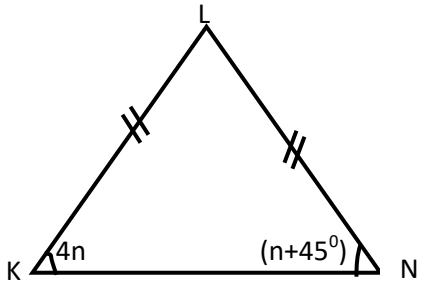
Marks	**Frequency**	**Total marks**
4	4	16
5	___	45
__	14	84
7	8	___
9	5	45

a) Complete the above table

b) How many pupils did the test?

c) Work out the mean mark.

30. The figure below is an Isosceles triangle NKL. Use it to answer questions that follow.



a) Find the value of n in degrees

b) Calculate the size of angle NLK.

31. Find the least number of mangoes that can be shared by 20 pupils, 30 pupils or 40 pupils leaving a remainder of 5.

32. Given that Y = x + 2

a) Complete the table given.

X	-1	0	1	2	__	___
Y	1	--	--	4	7	8

b) Plot the points on the grid graph given below