



PERFECT EDUCATION SERVICES - KAMPALA  
PRIMARY SEVEN PRE PLE SET TWO EXAMINATIONS  
2022

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.

EMIS No.						Personal No.		

Candidate's Name .....

Candidate's Signature.....

EMIS Number.....

District Name .....

SECTION A

1. Workout: **942 – 20**

2. Write **Nine hundred ninety thousand, Forty** in figures

3. Find the next number in the sequence:  
**16, 4, 1, \_\_\_\_\_**

4. Draw a venn diagram to show that all ducks (**D**) are birds (**B**)

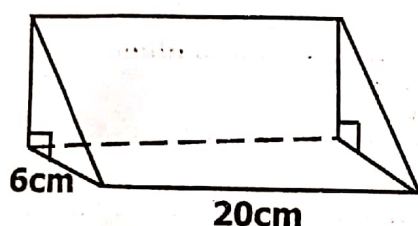
5. Simplify:  $\frac{6xy^2}{24x^2y}$

6. What time is **11:23pm** on a 24 hour clock?

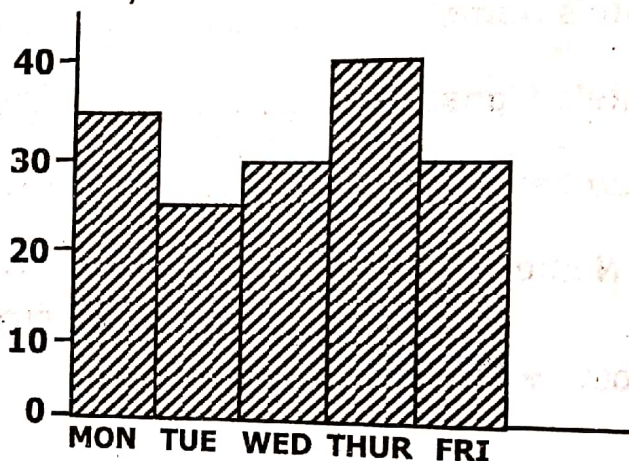
7. Using a ruler, a pencil and a pair of compasses only, construct an angle of  $150^\circ$

8. Solve:  $12 = 4 + \frac{24}{m}$

9. The volume of the prism below is  $480\text{cm}^3$ . What is the height of the prism



10. The graph below shows the daily attendance of pupils in a class of 40. What percentage of pupils were present on Tuesday?



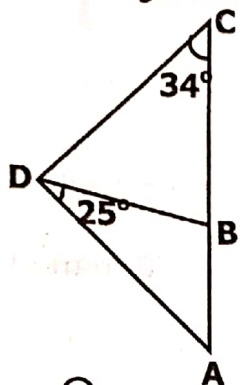
11. The temperature on Mt. Elgon was  $-17^\circ$  Celsius at midnight. By midday, the temperature rose to  $23^\circ\text{C}$  Celsius. What was the raise in temperature?

12. The area of a square flower garden is  $1\frac{13}{36}\text{m}^2$ . Calculate the length of its sides.

13. Arrange the following numbers in descending order: **0.4040, 0.0404, 4.400, 4.040**

14. Joseph bought a fountain pen and sold it at **sh. 3800**. If he got a loss of **sh. 700**, find his selling price

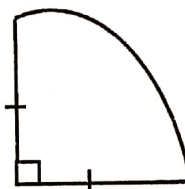
15. In the triangle **ADC**, angle **ADC** =  $80^\circ$  and angle **ACD** =  $34^\circ$ . Find the size of angle **ABD**



16. What should be added to  $3y+3$  to get  $4y-4$ ?

17. If  $\bigcirc$  represents 8 oranges, how many oranges are represented by  $\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$

18. The perimeter of the figure below is 50 dm. Find its radius



19. A parent increased the daughters' pocket money from sh. 40,000 to sh. 60,000. In What ratio was the pocket money increased?

20. A mathematics test ended at 1:15pm after having lasted for 2hours 30minutes. At what time did the lesson begin?

### SECTION B

21. A trader sells oranges in heaps of five and eight. A heap of five oranges costs sh. 600 and a heap of eight oranges cost sh. 1000. He had **P** heaps of five and 15 heaps of eight mangoes.

a) If he sold all the oranges and got sh. 22200 altogether. Find the value of **P**. (3 marks)

b) How many oranges did he have altogether?

(2 marks)

22. In a village **SACCO**, Omoding deposited **sh 180,000** at a simple interest rate of **7½%** per annum.

a) Find the interest he had at the end of **20 months**.

(3 marks)

b) If he used his total amount of money he had at the end of **20 months** to buy shares at **sh 4005** each, how many shares did he buy?

(2 marks)

23. a) Find the product of the value of **3** in the number **4309** and the value of **9** in the number **10.693**

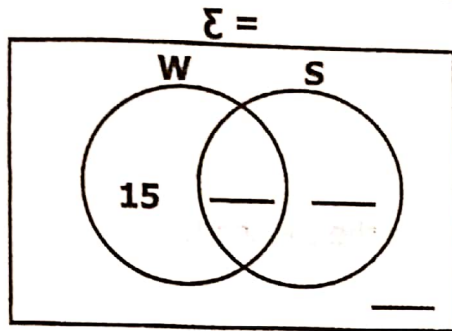
(4 marks)

b) Write **MCMIX** in words

(1 mark)



24. At a birthday party, **15** guests were served water(**w**) only, **17** guests were served Soda(**s**) only **x** guests were served both water and soda and **2x** did not drink anything. Use the information given above to complete the venn diagram below (3 marks)



b) If **forty four** guests attended the party, how many guests did not drink soda at all? (3 marks)

25. In  $1\frac{1}{2}$  hours, John's car uses **8L** of diesel to cover **90 km** while travelling at the same speed.

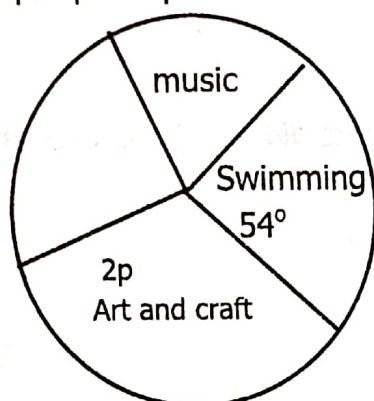
a) What distance does he cover if his car consumes **12 litres**? (2 marks)

b) The cost of **1 litre** of diesel is **sh.2500**. If John maintains the same speed, find the cost of fuel needed to cover a distance in **3 hours**. (3 marks)

26.a) Given that:  $m = 3k = -6$ . Find the value of  $3m - 6k$  (2 marks)

- b) Solve and find the solution set for the inequality if  $x$  is a positive integer:  $-4 < 2x \leq 6$  (3 marks)

**27.1080** pupils participated in different societies as shown on the pie chart.



- a) If **216** pupils participated in music. Find the value of  $p$ . (3 marks)
- b) How many more pupils participated in Art and craft than in swimming club? (2 marks)
- 28.** The mean of four consecutive counting numbers is **18.5**. If the largest number is  $d - 2$ , (4 marks)
- a) Find the value of  $d$ .

29. Using a ruler, a pair of compasses and a pencil only, construct a parallelogram **TVSU** where **TV=5.4cm**, **VS=7cm** and angle **TVS=105°** (4 marks)

b)i) Drop a perpendicular from **S** to meet line **TV** at point **O** (1 mark)

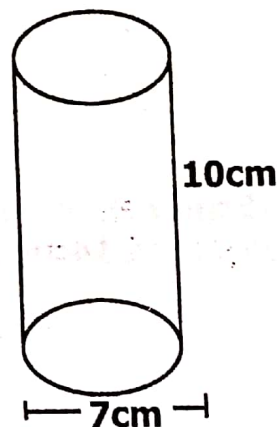
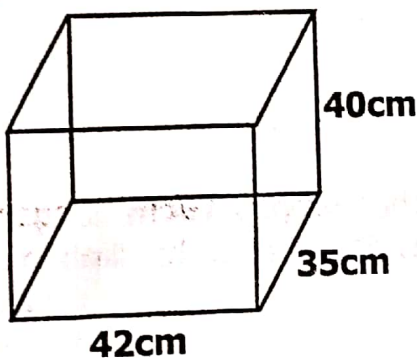
(ii) Measure length **OS**. (1 mark)

30.a) A frog fell in a hole **115cm** deep. It climbed **58cm**, then slipped **19cm**, it again climbed **67cm** and then slipped **14cm**. How many **cm** does it need to climb in order to get out of the hole? (2 marks)

b) If today is **Friday 13<sup>th</sup> October**, what day of the week was it on the **18<sup>th</sup> of August** the same year? (3 marks)

31. A tank is  $\frac{4}{5}$  full of water. When  $\frac{1}{3}$  of that water is drawn, the water needed to make the tank full can last a family **42 days**. How many days does a full tank last? **(4 marks)**

32. In a factory, cylindrical tins of diameter **7cm** and height **10cm** are packed in a box measuring **42cm** by **35cm** by **40cm** as shown below.



a) How many cylindrical tins can be packed in the box **(2 marks)**

b) Work out the volume of the box left unoccupied. **(3 marks)**