PERFECT EDUCATION SERVICES - KAMPALA
PRIMARY SEVEN SPECIAL SET TWO EXAMINATION
2022
MATHEMATICS
Time Allowed: 2 hours 30 minutes

Index No.	EMIS No.					Personal No.		

Candidate's Name ....

Candidate's Signature ....

EMIS Number ....

District Name ....
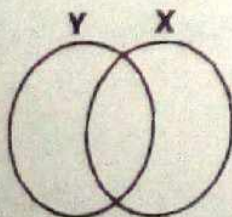
SECTION A

1. Workout **41 x 3**

2. Write in **figures Four hundred eight thousand, forty nine.**

3. Workout 6 - 4 using a number line
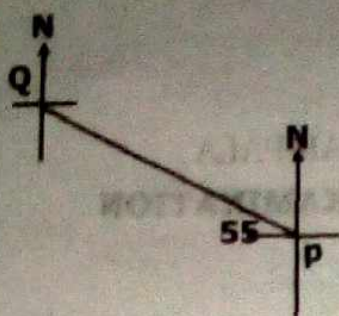
4. Subtract **3k + 3** from **4k − 4**

5. In the venn diagram below, shade the complement of the intersection.

Y   X

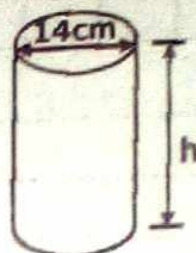**6.** Workout: $3\frac{1}{3} \div 2\frac{1}{4}$

7. The diagram below shows the positions of two villages **P** and **Q**. Use it to find the ordinary bearing of village **P** from **Q**.

N

Q

55

P

8. Workout: $(72.5×950) - (72.5×850)$ using distributive property.

9. Find the difference between the **5th** and the third cube number.

10. The figure below is a cylindrical container whose volume is **3080cm³**. Find its height

14cm

h

11. Using a **pair of compasses**, a **ruler** and a **pencil** only, construct an angle of **135°** in the space provided below.

12. A man's salary was reduced by $12\frac{1}{2}$%. If he was earning **sh. 480,000**, calculate his new salary.

13. Change **250** centimetres to metres.

14. The temperature of ice was **-8°C** at **6:30am**. By **9:15am**, the temperature had dropped by **3°C**. What is the temperature of ice now?

15. Simplify: $7 - 2(4P+4)$

16. Mazinga scored the following marks in a series of tests. **44%, 55%, 69%, 42%, 82%** and **27%**, find the range of the scores.

17. Find the next number in the sequence below.

    64, 16, 4, 1, _____

18. John had 76 notes of Ten thousand shillings. If the serial number of the last note was **AX000612**, what was the serial number of the first note?

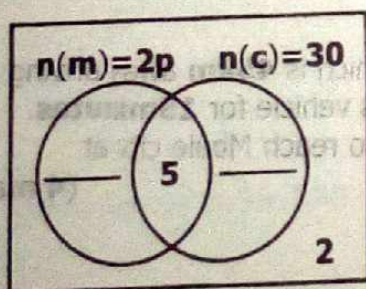**19.** Round off **349.998** to the nearest whole number.

20. A parents' meeting which ended at **1:20pm** lasted for **2hours 45minutes**. At what time did the meeting start?

SECTION B

21. At a birthday party attended by **47** guests, **30** guests were served with chicken (**c**), **2p** were served with meat (**m**) **5** guest were served with both meat and chicken while **2** guests did not eat either of the two dishes.

a) Use the given information to complete the venn diagram   **(2 marks)**

n(m)=2p   n(c)=30

5

2

b) What is the probability of choosing a guest who ate only one type of dish?   **(3 marks)**
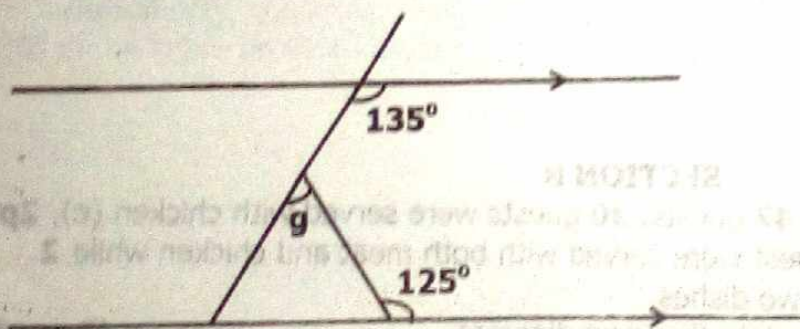
22.a) Express the recurring decimal **0.3444......** as a common fraction   (2 marks)

b) Simplify: $\frac{2}{3} \times \frac{1}{4} - \frac{1}{12} + \frac{1}{2}$ (3 marks)

23. The interior angle of a regular polygon is **20%** more than the exterior angle. Find the size of each exterior angle.   (3 marks)

b) Study the figure below and use it to find the value of **g** in degrees.   (3 marks)

24. A motorist leaves his home at **10:00am** for Mbale city which is **45km** away driving at **32km/hr**. At **10:15am** he gets a puncture and repairs his vehicle for **15minutes**. At what speed must he cover the remaining journey in order to reach Mbale city at **11:00am**?   (4 marks)

25.a) Represent 3021_{five} on an abacus (2 marks)

b) Given that $1002_m = 131_{four}$, find the value of the unknown base. (3 marks)

26. The table below shows the exchange rates in PJMAX Forex bureau.

Currency	Buying price	Selling price
Ksh.1	Ugsh.36	Ugsh.38
Us$1	Ugsh.3650	Ugsh. 3720

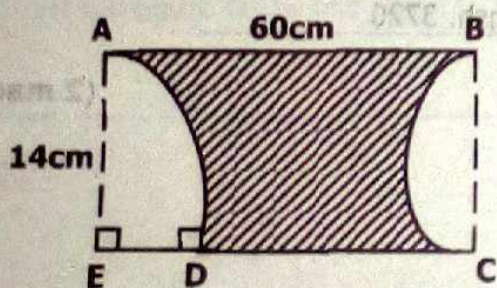a) How much in Uganda shillings is **Ksh. 1800**? (2 marks)

b) A tourist has Us dollar **570**, how many Kenya shillings will he get? (3 marks)

27. a) A son is a quarter the Father's age. In 10 years' time the father's age will be twice the son's age. How old is the father? **(3 marks)**

b) To each of the numbers **30** and **45**, **X** is added and the ratio of the resulting numbers is **8** to **11** respectively. Find the value of **X** **(2 marks)**

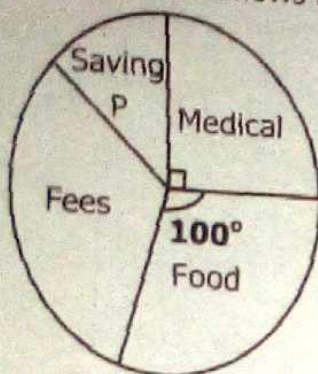**28.** Study the venn diagram below and answer the questions that follow.

a) Find the perimeter of the Figure **ABCDA** (use $\pi = \frac{22}{7}$) **(3 marks)**

b) Workout the area of the shaded part (use $\pi = \frac{22}{7}$) **(3 marks)**

29. A school spends **25%** of its money on books, ? on salaries and ? of the remainder on transport. The remaining amount was **sh.400,000**. How much money did the school have at first?

(5 marks)

30. The pie chart below shows how a family spends its weekly income of **sh. 720,000**.

a) What percentage does the family spend on medical?

(2 marks)

b) If the family spends **sh.240, 000** on fees, find the value of **P**.

(3 marks)

31. A cylindrical tank was $\frac{1}{3}$ full of water. When $\frac{2}{5}$ of the water in the tank was added, the tank had a capacity of 280litres. Find the capacity o the tank when $\frac{5}{6}$ full
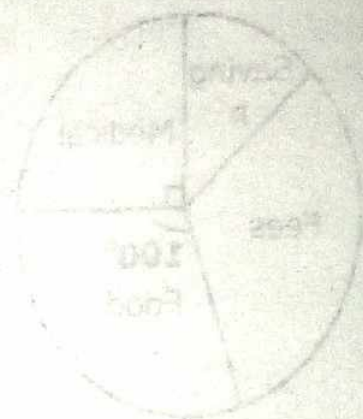
(5 marks)

33. A ship sailed from port K on a bearing of 130° to port M on a distance of _____ k then turned and continued to port N on a bearing of _____ through a distance of _____

a) Using a scale diagram of 1 cm to represent _____ km, draw the scale diagram to show the journey of the ship. **(4 marks)**

b) What is the bearing of port N from port K?

(1 mark)

32. A ship sailed from port **K** on a bearing of **120°** to port **M** on a distance of **300km**. It then turned and continued to port **N** on a bearing of **235°** through a distance of **400km**.

a) Using a scale diagram of **1 cm** to represent **50km**, draw the scale diagram to show the journey of the ship. **(4 marks)**

b) What is the bearing of port **N** from port **K**?

(1 mark)