RAAYAT ISLAMIC NURSERY & PRIMARY SCHOOL.

P.O BOX 8296 KAMPALA MAKINDYE II SALAMA ROAD

PRE-PLE SET 1

MATHEMATICS

NAME: ……………………………………………………………………………………..

INDEX NUMBER: ⬚⬚⬚⬚⬚⬚⬚⬚⬚

TIME ALLOWED

2hrs : 30min

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

Read the following instructions carefully:

The paper has two sections A and B

Section A, has 20 questions (40 marks)

Section B, has 12 questions (60 marks)

Answer ALL sections A and B

All answers MUST be written using a Blue or Black ball-pointed pen and ink.

Un-necessary alternation of work may lead to loss of marks.

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

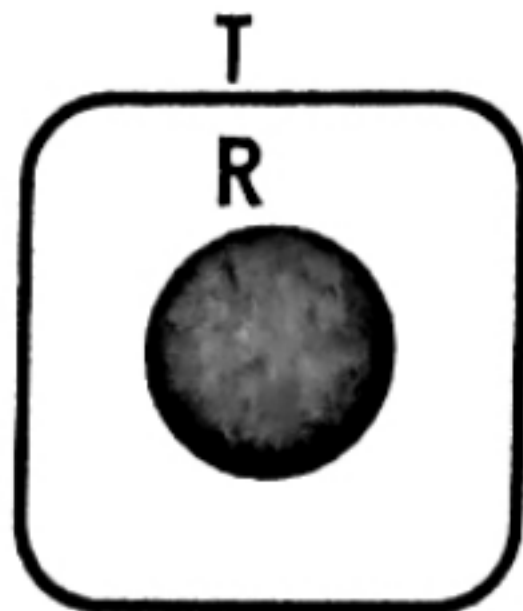*Do Not fill any thing in the boxes shown. "FOR EXERMINERS' USE ONLY".*

1. Add 2056 + 5

2. Simplify; -10 - - 2

3. Write in figures; Five hundred thirty-two thousand, ninety-seven
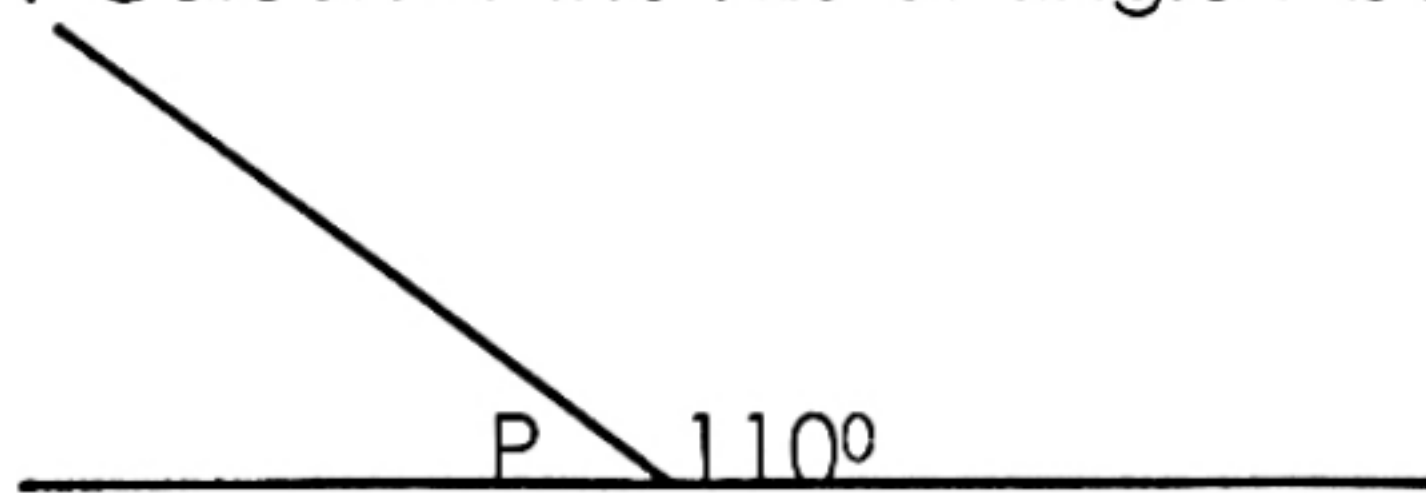
4. Work out: $\frac{7}{8} \div \frac{3}{16}$

5. What does the shaded region represent in the diagram below?

6. Express XXXIV in Hindu – Arabic numerals.

7. Calculate the size of angle **P** below.

8. Find the next number in the sequence: 81, 64, 49, 36, _____

9. Round off 64. 98 to the nearest tenths.

10. Using a pair of compasses, a ruler and a pencil only, construct an angle of 60^0

11. Simplify: $\dfrac{0.04 - 0.14}{0.6}$

12. List all the subsets of set K = {x, y, z}

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

14. Given that p = 4 and q = -6, find the value of 2p – q.

15. Find the mean of the following numbers: 6, 0, -4, -6, 5, 7

16. Simplify: 3(m – 7) – (2m – 8)

17. In a P7 class, the ratio of boys to girls is 3:2. Find the number of girls if there are 18 boys in that class.

18. Subtract 0. 09 from 10	19. Simplify $6^2 – 3^3$

20. An examination started at 3:30p.m. and ended after $2\frac{2}{3}$ hours. At what time did it end?

SECTION B (60MARKS)

21. In a class of 30 pupils, 18 pupils like Music (M), x pupils like Art (A) and 10 pupils like both Music and Art. 6 pupils like none of the two subjects.

a). Draw a Venn diagram to represent the above information. (3mks)

b). Find the value of x (2mks)

c). Find the probability of choosing a pupil who likes Art only. (2mks)

22. a). Using a ruler, pencil and a pair of compasses, construct a triangle PQR such that angle PQR = 75⁰, angle QPR = 60⁰ and length PQ = 6cm. (4mks)
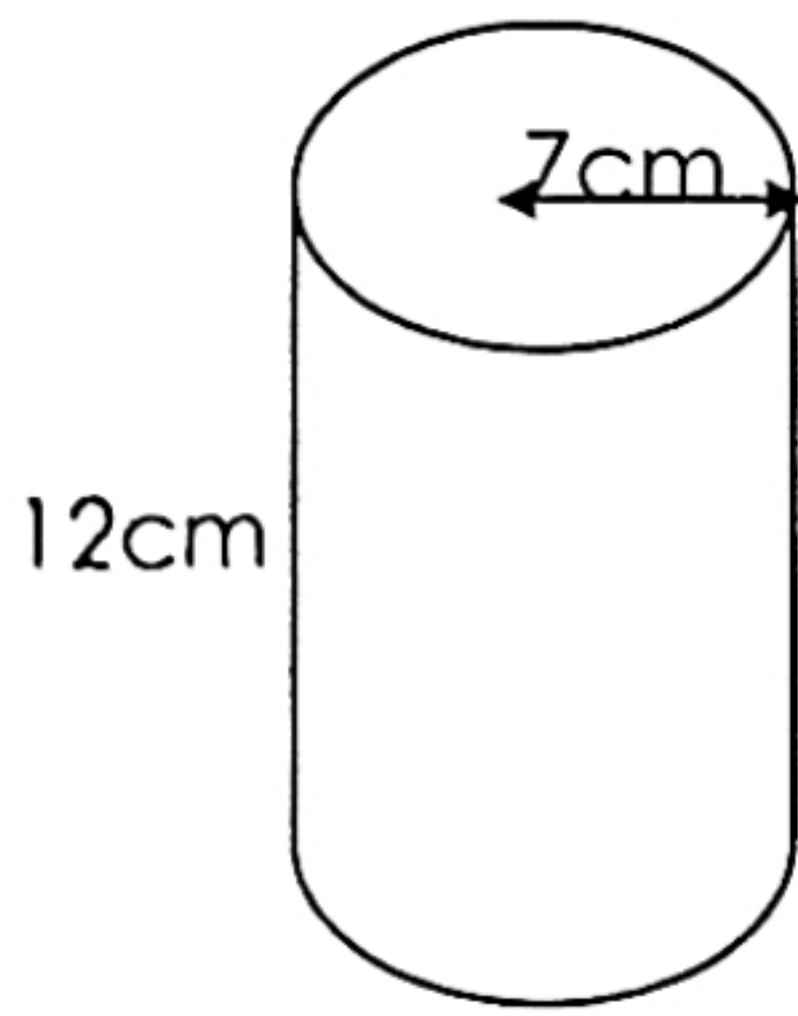
b). Measure length QR. (1mk)

23. a). The sum of three consecutive odd numbers is 105. Find the numbers. (3mks)

b). Workout their range. (2mks)

24. The diagram below shows a cylinder of radius 7cm and height of 12cm.
a). Calculate the volume of the cylinder. (2mks)

12cm

b). Calculate the surface area of the cylinder. (2mks)

25. a). A bus covered 94,000metres in 3,600 seconds. What was the speed f the car in metres per second? (2mks)

b). Express the speed above in km/hr. (3mks)

26. a) Solve: $2(w - 4) = 6$ (2mks)

b). Write the inequality of the statement: A father's age, represented by letter K, is 14 years older than his son's age. Their total age is less than 50 years. (1mk)

27. a). Kamugisha has to fence around her rectangular plot of land 225m by 165m. The fencing pole will be 3m apart. How many poles will she need? (3mks)

b). If each pole costs Shs2,000, how much will she spend on fencing her plot of land? (2mks)

28.a). A drum is full of water to a capacity of $\frac{3}{4}$. If 9litres of water are removed, it becomes $\frac{1}{2}$ full of water. Find the fraction of water removed. (2mks)

b). What is the capacity of the tank? (2mks)

29. a). Town S is 60km west of Town R and Town K is 50km from R on a bearing of 150⁰. Draw a sketch showing all the three features. (2mks)
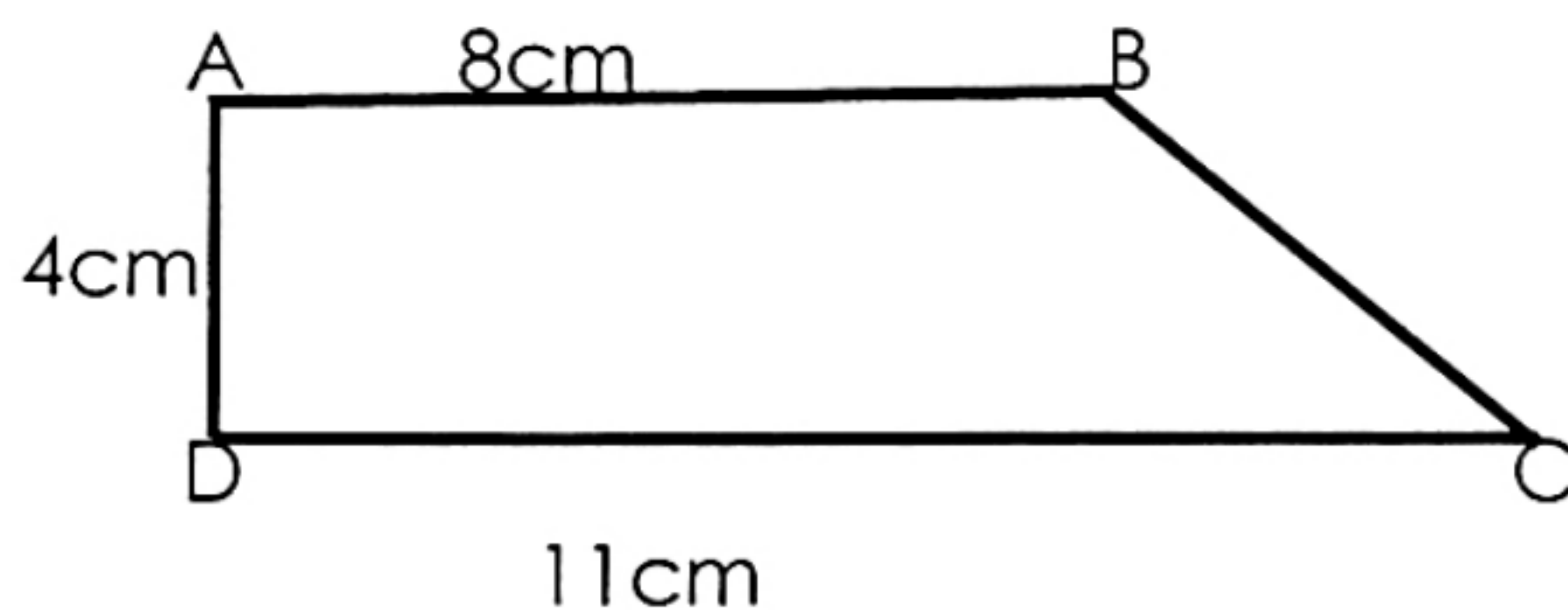
b). Using a scale of 1cm = 10km, draw an accurate diagram showing the three towns. (3mks)

c). What is the shortest distance from S to K? (1mk)

30.a). Workout: $\frac{1.44 \times 0.9}{0.6 \times 0.12}$ (2mks)

b). Convert 0.08 to its percentage equivalence. (2mks)

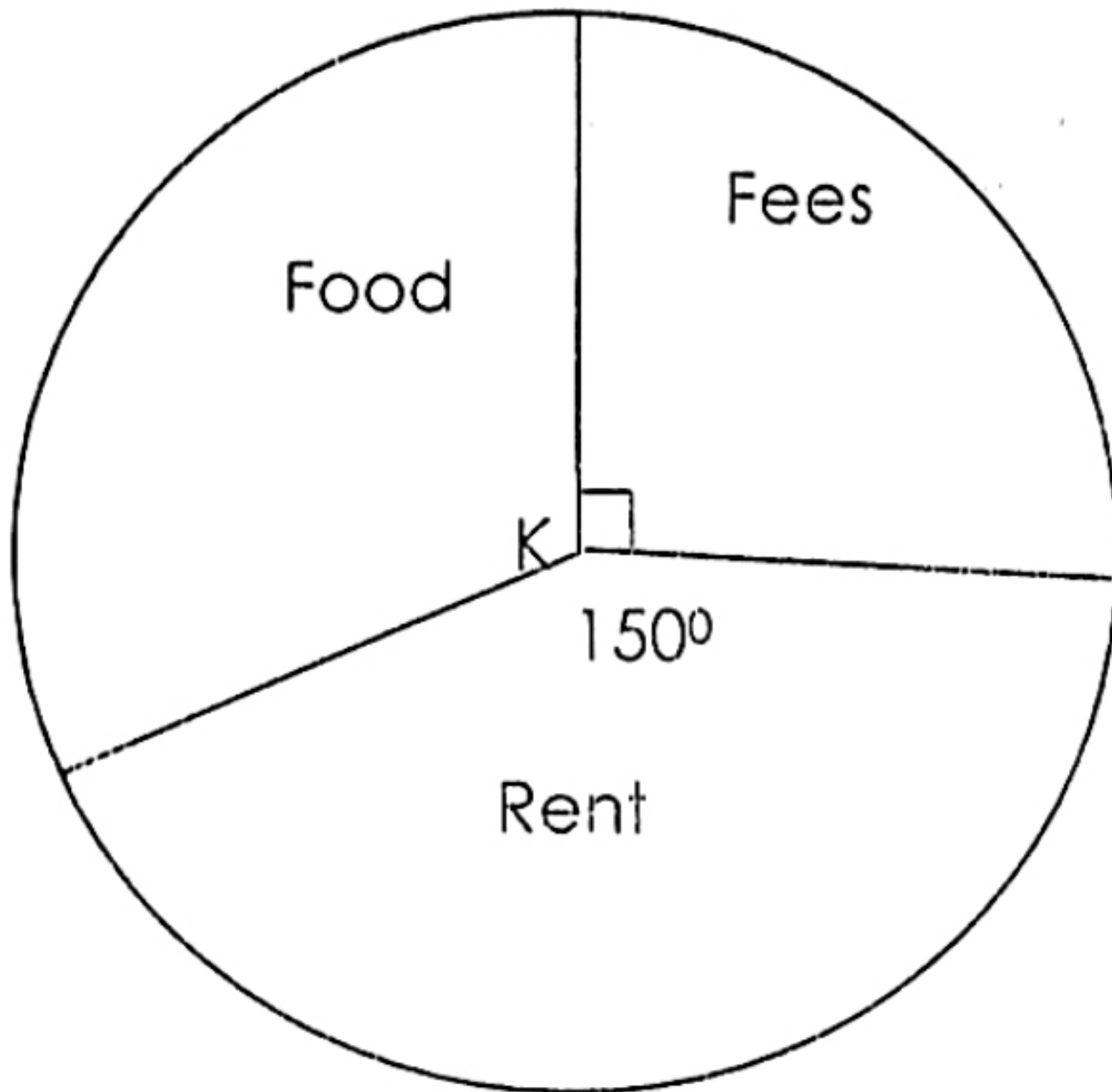31. Use the figure below to answer the questions that follow.

a). Find the area of the figure above. (3mks)

b). Workout its perimeter (2mks)

32. The pie chart shows Agnes' expenditure per month.

a). Find the value of K. (2mks)

b). Given that Agnes spends Shs3,600 more on rent than on food, how much does she earn per month? (3mks)