



KAMSSA LOWER SECONDARY LEVEL EXAMINATIONS
MATHEMATICS
SENIOR TWO
END OF CYCLE ASSESSMENT 2023
2 Hours 30 Minutes

SCHOOL:

NAME:

Do not write in the boxes on this page. The examiner will use them to keep records of your marks

SECTION A

Question	1	2	3	4	5	6	7	8	9	10	Total
Marks scored											

SECTION B

Question	11	12	13	14	Total
Marks scored					

Instructions

- Answer all questions in section A and **any three** from section B.
- Each question in section A carries **4** marks and each question in section B carries **20** marks.
- Show all the necessary workings and explanations on the answer sheets provided.

SECTION A (40 Marks)

1. A farmer distributed his bags of cabbages as follows. A certain hospital received a quarter of the total number of bags. A nearby school received half of the remainder. A green grocer received a third of what the school received. What remained was six more than what the green grocer received. How many bags of cabbage did the farmer have? (4 scores)
2. Manyatta village is 74km North West of Nyanga village. Chamwe village is 42km west of Nyanga. By using an appropriate scale drawing, find the bearing of Chamwe from Manyatta. Re (4 scores)
3. Four men took their goats to the market, Mohammed had two more goats than Ali. Juma has as many goats as Mohammed. Whereas Odupoy had 10 goats less than both Mohammed and Juma. If three butchers bought all the goats and share them equally and each butcher got 16 goats. As a form two student, help Odupoy to know the number of goats he was supposed to sell to the butchers. (4 scores)
4. Mr. Waguwenda borrowed UGX 560,000 from a bank to buy a piece of land. He was required to repay the loan with simple interest for a period of 48 months. The repayment amounted to UGX 21,000 per month. Guide Mr. Waguwenda the interest he has to pay to the bank and justify your answer. (4 scores)
5. Mwanji and Otieno live 40km apart. Mwanji starts from his home at 7:30 am and cycles towards Otieno's house at 16km/hr. Otieno starts from his home at 8:00am and cycles at 8km/h towards Mwanji. At what time do they meet? Justify your answer. (4 scores)
6. The size of an interior angle of a regular polygon is $6\frac{1}{2}$ times that of its exterior angle. Determine the number of sides of the polygon. (4 scores)
7. The length of a rectangle is three times its breadth. If the breadth is decreased by 2m and the length increased by 4m, the area of a rectangle is decreased by a third. Find the area of the original rectangle. (4 scores)
8. The number of people who attended an agricultural show in one day was 510 men, 1080 women and some children. When the information was represented on a pie chart. The combined angle for the men and children was 216° . Find the angle representing the children. (4 scores)
9. Joseph and John take 30 and 40 minutes respectively to run round a circular track. If they started their race at 8:00 am from the starting point. After how many hours will they be at the starting point? Justify your answer. (4 scores)

10. Peter was given a box having consecutive odd numbers and was not allowed to open the box however he was told that the sum of these three consecutive odd numbers in the box is 219 as a senior two student help Peter to determine these numbers. (4 scores)

SECTION B (60 marks)

11. Two business partners Nzau and Masese contributed Sh. 112,000 and Sh. 128,000 respectively to a business. They agree to share their profits as follows.
30% to be shared equally
30% to be shared in the ratio of their contribution.
40% to be retained for the running of the business.
If the total profit for the year 2022 was Sh. 86,400, how much was received by each partner and how much was retained for the running of the business? Justify your answer. (20 marks)
12. Three islands P, Q, R and S are on an ocean such that island Q is 400km on a bearing of 030° from island P. Island R is 520km and a bearing of 120° from island Q. A port S is sighted 750km due south of island Q
a) Taking a scale of 1cm to represent 100km, give a scale drawing showing the relative positions of P, Q, R and S and hence use your scale drawing to find the bearing of R from island P and bearing of Port S from island R.
b) A warship T is such that it is equidistant from the islands P, S and R by construction locate the position of T and find the distance between island P and R. (20 marks)
13. A Gagga bus left Kampala at 8:00am and travelled towards Kasese at an average speed of 80km/hr. At 8:30am, a Link bus left Kasese towards Kampala at an average speed of 120km per hour. Given that the distance between Kampala and Kasese is 400km
Determine
i) The time the Link bus arrived in Kampala.
ii) The time the two buses met and the distance from Kampala where the two buses met.
iii) How far the Gagga bus is from Kasese when the Link bus arrives in Kampala. (20 marks)
14.
a) In 2022, the cost of processing a bag of wheat was Ksh 250, and this was divided between electricity costs and labor in the ratio 2:3. In the year 2023, the cost of electricity doubled while the cost of labor increased by X%. Calculate the value of X given that the cost of processing a bag of wheat in 2023 is 425.
b) A piece of land is in the shape of a quadrilateral ABCD such that side AB=AD=50m, $\angle DAB=100^\circ$, $\angle ABC = 87^\circ$ and $\angle ADC = 79^\circ$. Determine the length of a barbed wire that would go around the land to the nearest metre.

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