



BLESSED VICTORS SENIOR SCHOOL- BUWALULA

END OF TERM II ASSESSMENT 2024

S. 2 MATHEMATICS (COMPETENCE BASED CURRICULUM)

Time: 2 hours

Name.....

Attempt all Items in this paper

Item 1

You decided to have a Joint party with your family members which will cost a total of Uganda shillings four million. You are nearing a D-Day and you want to find out whether you have enough required amount of money or not. And below are the contributions;

- * Your parents promised to contribute 30% of the money.
- * Your friends promised 10% more than that your parents promised.
- * And since you are the owner of the party, you contributed 20% of the required amount.

When you went for shopping, you moved 6km due East from your home and the the 8km due south to reach the market, but the old man on the way told you that there is a shortest route you would use to reach the market directly to save time. And you made a booking of shillings; one million, seventy five thousand for all items required for the party.

Task

As a Mathematics learner,

- (a) How far from your home to the supermarket if you used a direct route?
- (b) Make a simple budget for the party according to the booking.
- (c) Do you have the required amount for the party? Justify.
- (d) What advice can you give to the party organizing committee?

Item 2

Ayebare's family is building a new rectangular flat house with a length of 15 meters and a width of 8 meters. They need to cover the roof with iron sheets, each measuring 2 meters by 1 meter. Two hardware shops, A and B, sell the required iron sheets at different prices.

Shop A sells each iron sheet at Shs 35,000, with a 10% discount for every 50 sheets purchased.

Shop B sells each iron sheet at Shs 40,000, with a 5% discount for every 40 sheets purchased.

Task:

As a Mathematics learner,

- (a) How many iron sheets are needed to cover the entire roof of the house?
- (b) Calculate the total cost of iron sheets from Shop A, including the discount.
- (c) Calculate the total cost of iron sheets from Shop B, including the discount.
- (d) Which shop offers the better deal, and how much can Ayebare's family save by choosing that option?

Item 3

Nakatude's family owns a small farm in the village, where they grow and sell vegetables. They want to enclose a rectangular garden with a fence. The length of the garden is 5 meters more than the width.

Task

As a Mathematics learner,

- (a) what are the dimensions of the garden?
- (b) If the fencing material costs Shs 500 per square meter, and they want to spend not more than Shs 50,000 on fencing, is their budget sufficient?
- (c) The family makes a profit of Shs 2,000 per square meter of tomatoes sold, and they want to make a profit of at least Shs 150,000. Will they meet their target profit?

Item 4

In preparation for S4 prom party, you were chosen by your fellow candidates to be a chairperson organizing committee. You moved from school to town A which is 160km north of your school, for shopping party items. From town A you moved westwards 150km to town B. From B you headed to town C in the direction $S75^\circ W$ which is 90km from B. From C you continued to town D which is 148km and south of B but after you discovered that there is the shortest route you could use to move directly from school to town D.

In the shopping, you bought 400 chicken and each cost UGX 35,000. The farmer gave you a 2% discount on each chicken. You also bought two identical jerrycans of cooking oil. The larger being of height 30cm and smaller 15cm. The larger has a capacity of 10 litres. And you bought 4 smaller and 2 larger jerrycans.

Task

- (a) Determine how far you would move if you used a direct route.
- (b) Determine the total cost incurred in purchasing chicken.
- (c) What is the maximum amount of cooking oil you bought for the party?

Department of Physics and mathematics BVSS

Wishes you success **Sekaki? **