**PEAS BRIDGE HIGH SCHOOL MITOOMA**

**S. 3 END OF TERM 1 EXAMINATIONS**

**Mathematics**

**TIME: 2 hours**

**STUDENT”S NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_STREAM……………..**

INSTRUCTIONS:

 Answer all the questions in section A and write the answers in the spaces provided.

Each question in section A carries 4 marks

Answer **ONLY TWO QUESTIONS** from section B and each question in this section carries 20marks

# **SECTION A (40 MARKS)**

1. Elon Musk, this month of October 2022 paid 44 billion dollars to purchase twitter. If he got 45% of the money from selling his assets and rest from a bank loan. What is the value of money he got from selling his assets and Bank in figures?

|  |  |
| --- | --- |
| Sell of his assets | Bank |
|  |  |

1. In a Geography lesson, Alex learnt about the following places; Mount Longonot, Mount Elgon, Mount Meru, Mount Kilimanjaro, Mount Rwenzori, Kenya, Tanzania and Uganda.
2. Draw an arrow diagram to show the relation amongst the places listed.
3. What is the domain and the range from your relation?

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1. Given that the inflation rate according to bank of Uganda increased by 6.8%, implying that the price of commodities have increased by that mentioned rate?

If the price of posho is now 4500/= what is the original price of the commodity?

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1. A Farmer said he annually spends at least 8000 per acre on spraying, weeding 24,000 per acre and shs 20,000 on pruning per acre. What is the spending on a farm of 20 acres? (4marks)

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1. The sum of two numbers is 27. If one of the numbers is twice the other. Find the numbers. (4marks)

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1. Using a relation that 3 − 2, what is the domain if the range is {4,10,16,22}

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1. Rationalise (04 marks)

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1. (a) At the market, Marion had 80,000. He spent of his money on books and of the remainder on open shoes. How much money did she remain with after her spending with transport of 5000? (4marks)

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1. Simplify +2 14 (4 marks)

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1. A promo costs sh 50,000 for equipments and 10,000 per person’s costume. If an MTN promo has 20 people participating in it. Form an equation and use it to find the overall cost of the promo?(4marks)

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**SECTION B**

***Answer only two questions from this section***

1. (a) a rectangular garden has a short road passing through its diagonal. The garden is 3km long and 5km wide. What is the length of the road (4marks)
2. Okello is making a small triangular roof of sides 4cm for his hut. what is the length of the middle pillar.(leave your answer in surd form) (6marks)
3. Find the area of the square of side (5 + )cm (5marks)
4. Simplify (5marks)
5. (a) On the same graph, represent the following inequalities and shade the unwanted regions.
6. x
7. 2y + 3x <6
8. y 2x-2 (12 marks)

(b) Solve the inequalities below and represent your solutions on a number line.

(i) -3 < 3(x-5) (4marks)

(ii) 3(2y +6) <8y+10 (4marks)

1. (a) A rectangular tray measures by 125cm by 75cm. How many cakes can fit on the tray if each cake has a circular base of uniform diameter of 6cm. (6marks)

(b) Find the radius of the circle given that its area is

(i) 17.6cm2 (ii) 2464dm2  (6marks)

(c) Find the area of the circle given that the radius is;

(i) 12.6cm (ii) 38.2cm (iii) 42cm (iv) cm (take =) (8marks)

1. The caterer of a school located in kira Municipality is required to buy food stuffs for a school party. The foodstuffs to be bought include: 100 kg of rice, 150kg of meat and 200kg of Irish potatoes. The cost is UGX 4000, UGX18,000, and UGX1500 per kg of rice, meat and Irish potatoes respectively in kyaliwajara market. The same items cost UGX. 2500, UGX. 14,000 and UGX. 1,200 per kg of rice, meat and Irish potatoes respectively, in Gayaza market. To hire a pick-up from Kyaliwajara market to school costs UGX 50,000 while a pick-up hire from Gayaza farmers’ market is UGX100,000.
   1. Using the information provided above, how would the caterer decide on where to do the shopping from? Justify your answer. (20 Marks)

END