**LION’S JUNIOR SCHOOL**

PLE COUNT DOWN EXAMINATION, 2023

**MATHEMATICS**

PRIMARY SEVEN

Duration: 2 Hours 10 Minutes

**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SIGN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**RANDOM/ PERSONAL** NO.

**SECTION A**

1. Work out: 107 + 13
2. Express LXIX in Hindu Arabic numerals.
3. Round off 79.97 to the nearest tenths.
4. A school watch man’s salary of sh. 120,000 was increased by 20%. What is his new salary?
5. **Describe the unshaded region in the Venn diagram below.**

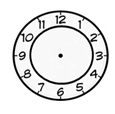
**P Q**

1. A radio costs Kenya sh. 9000. Peter paid ug. Sh. 324,000 for the same radio. Find the exchange rate of Kenya shillings to Uganda shillings.
2. Find the value of t in the figure.

**1100**

**2t**

1. Given that a = 5 and b = 0. Find the value of 3a + 4b
2. A teacher’s meeting started in the morning time as shown on the clock face below.



If the meeting last 1 ½ hours, at what time did it end?

1. Simplify: 3y – 4m – 2m + 5y
2. With the help of a ruler, pencil and a pair of compass only, construct an angle of 1050.
3. **Workout the next number in the sequence below.**

1, 3, 6, 11, 18, 29, \_\_\_\_\_\_\_

1. A motorist covered 450 metres in 1 ½ minutes. Calculate his speed in metres per second.
2. Find the complementary angle of (40 – 2t)0
3. Susan wants to pack 25.5kg of sugar in small Sackets. If each Sacket holds 0.5kg, how many Sackets are needed?
4. Simplify: – 3 – + 2
5. **Calculate the perimeter of the figure below.**

5cm

4cm

1. Electric poles are planted 30 metres apart along a straight road. Amina moved from the 3rd pole to the 12th pole. What distance did she cover?
2. Given that 5n x 5 = 125. Solve for n.
3. In the figure below, find the bearing of M from T.

**N**

**N**

**470**

**T**

**M**

**SECTION B**

1. a) Solve for P: 2p2 – 4 = 124 3mks

b) The perimeter of a rectangle is 56cm. its length is thrice its width. Find the length of the rectangle. 3mks

1. The Venn diagram shows the number of students who play volley ball (V) and Netball (N). The number of students who play volley ball equals to the number of students who play netball.

n(M) = n(V)=

3t 2t 36 – t

t+3

1. Find the value of t. 3mks
2. How many students do not play volley ball? 2mks
3. a) Work out: 2mks

b) 6 builders take 4 days to roof a house. How many more builders are needed to roof the house in 2 days? 3mks

1. Pupils in a lunch hour test scored marks as shown below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Marks*** | 70 | 40 | 20 | n |
| ***Number of pupils*** | 3 | 4 | 1 | 2 |

1. How many pupils did the lunch hour test? 1mk
2. Calculate the value of n if the mean mark is 45. 3mks
3. What was the median mark? 1mk
4. **The figure below is a piece of land. Use it to answer the questions.**

A 25m B

14cm

P D C

a) Workout he distance round the piece of land. 2mks

b) Calculate the area covered by the piece of land. 3mks

1. The sum of three consecutive odd numbers is 63. If the large number is t.
2. Find the number. 3mks
3. Write the smallest number in words. 1mk
4. Using a pair of compasses and ruler, construct a triangle ABC such that AB = 5cm, ABC = 1200 and BAC = 300, drop a perpendicular line from C to meet AB at

point K. 4mks

1. Measure AC. 1mk
2. Calculate the area of the figure. 1m
3. **Complete the shopping table below. 5mks**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Quality** | **Unit cost** | **Total** |
| Books | 24 books | Sh. 8000 per dozen | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Maths sets | ¼ dozen | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Sh. 12,000 |
| Pens | \_\_\_\_ pens | Sh. 800 | Sh. 4,800 |
| Stockings | \_\_\_\_dozens | Sh. 1500 | Sh. 4500 |
| Total |  |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

b) Calculate the amount of the customer paid, if he was given a discount of 10% on his total expenditure. 1mks.

1. The diagram shows a cylinder tank of radius 70cm and a height (P) cm as shown below.

**70cm**

**Pcm**

1. Find the height (P) of the cylinder, if its capacity is 770 litres. 3mks
2. Calculate the volume of the cylinder when water is ¾ full. 2mks
3. **Study the number line and answer the questions that follow.**

**R**

**Q**

-7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

**P**

1. Write the integers for: 1m @

P = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

R = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Write down an addition statement shown on the number line above. 1m
2. Study the diagram and use the information to answer the questions that follow.

**Q**

**R**

**T**

**2k**

**360**

**S**

**R**

1. Find the value of K in degrees. 3mks
2. Workout the size of angel QRS. 1mk
3. Alice left town A at 8:00 am and drove for 2 hours covering a distance of 100km to town B. she rested for 30 minutes at town B and then travelled to town C covering a distance of 80km in 1½ hrs.
4. Show the information on the graph below.



**0**

**80**

**140**

**160**

**200**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **180** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **120** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **100** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **60** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **40** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **20** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



1. Calculate the average speed for the whole journey.