# SUCCESS INTEGRATED PRIMARY SCHOOL Pre-Mock Examination (Set 2), 2020 Mathematics 

## Time: $\mathbf{2}$ hours $\mathbf{3 0}$ minutes

INDEX NUMBER


NAME: $\qquad$
Signature: $\qquad$
School: $\qquad$ FOR EXAMINER'S USE ONLY
District
Read the following instructions carefully:

1. This paper is made up of section $A$ and $B$.
2. Section $A$ has $\mathbf{2 0}$ short answer questions ( $\mathbf{4 0}$ marks).

| A |  |
| :---: | :--- |
| B |  |
| TOTAL |  |

3. Section $B$ has $\mathbf{1 2}$ questions ( $\mathbf{6 0}$ marks).
4. All answers to both section $A$ and $B$ must be written in the spaces provided.
5. All answers must be written in blue ink and diagrams should be drawn in pencil.
6. Any handwriting that cannot easily be read will lead to loss of marks.
7. Unnecessary alteration of work may lead to loss of marks.
8. No calculators are allowed in the examination room.

| PARENT'S COMMENT |  |
| :--- | :--- |
|  |  |
|  |  |
| SIGNATURE |  |
| Date: |  |

## SECTION A : 40marks

1. Work out: $345+132$
2. Write 94 in Roma numerals.
3. Simplify: $7 m-4 n+m+5 n$.
4. Find the next two numbers in the sequence: $1,8,27,64$, $\qquad$
$\qquad$ .
5. Shade the complement of set $P$ in the diagram.
( )

6. Work out: $0.875+0.25$.
7. A trader sold a shirt at sh. 32000 making a loss of sh.3000. How much had he bought the shirt?
8. Use the number line drawn below to answer the following questions.

9. What are the integers represented by the arrows on the number line above?
(i) $\mathrm{a}=$
(ii) $\mathrm{b}=$ $\qquad$
10. Using a protractor, a pencil and a ruler only, draw an angle of $72^{\circ}$ in the space provided below.
11. Given that $\mathrm{x}=2$ and $\mathrm{y}=5$, find the value of $\frac{3 \mathrm{x}+4}{\mathrm{y}}$
12. Use the Cartesian graph below to answer questions that follow:

(i) State the co-ordinates of point W .
(ii) Plot on the graph point $\mathrm{R}(-2,4)$
13. Set $A=\{a, b, c\}$ List down all the proper subsets formed from set $A$.
14. Work out: $11 / 2 \div 2 / 3$
15. Koshaho covered a distance of 20 km for every 2 hours. What distance did he cover in 42 minutes?
16. Find the distance around the quadrant below. (take $\pi 22 / 7$ )

17. The price of a radio was increased by $10 \%$ to sh. 22000 . What is the cost price of the radio?
18. What number was expressed in scientific form: $7.38 \times 10^{-2}$ ?
19. Use the figure below to find the size of angle $K$.

20. Given that a Japanese yen $(\not ¥) 1$ is equivalent to Ugandan shillings (Ugsh) 9.15. Convert Japanese $\ddagger 55000$ to Ugandan shillings.

## SECTION B 60 MARKS

21. In a certain class ( $d+5$ ) pupils like Mathematics (M) only, (2d-4) like both Mathematics and science (d+2) like Science (S) only, while (d-3) like neither Mathematics nor Science.
(a) Use the information above to complete the Venn diagram. (2mrks) ( $\xi$ )

(b) If 18 pupils dislike Science, find the value of d .
(c) Find the probability of selecting at random a pupil who likes Science only.
(1mrk)
22. Cards labeled box.
 8 were placed in a
(a) Arrange the cards in such a way that the largest numeral is formed.
(1mrk)
(b) Write the numeral formed in (a) above Using exponents. (2mrks)
(c) What is the sum of the largest and smallest numerals formed.
(2mrks)

23 Ruyooka used ${ }^{7} / 11$ of his land for crop growing and the rest for animal rearing.
(a) If he used 6 more hectares of land on crop growing than animal rearing animals, how big in hectares was Ruyooka's land? (4 mrks)
(b) How many hactares were used for animal rearing?
(1mrk)
24. The figures $A$ and $B$ have the same perimeter. Use them to find the area of figure B (Take $\pi 22 / 7$ )
(5mrks)

25. A bus travelled from Kabale to Mbarara at a speed of $80 \mathrm{~km} / \mathrm{hr}$ for 3 hours. It then continued from Mbarara to Kampala in 2hours. If the average speed for the whole journey was $88 \mathrm{~km} / \mathrm{hr}$.
(a) What is the distance from Kabale to Mbarara.
(2mrk)
(b) Use the average speed given to find the distance between Mbarara and Kampala.
(3mrks)

26(a) The interior angle of a regular polygon is thrice the size of the exterior angle. Name the polygon.
(3mrks)
(b) Using the figure below, find the size of angle x .
(2mrks)

27. During athletics competitions a teacher recorded the weight of the participants as follows.

| weight in kg | 60 | 50 | 30 | 55 |
| :--- | :--- | :--- | :--- | :--- |
| number of pupils | 1 | 3 | 1 | 2 |

(a) How many participants were measured?
(1mrk)
(b) Find the median weight.
(c) Calculate the mean weight of the participants.
(3mrks)
28. A tailor uses 6 metres of cloth to make 4 pairs of shorts. He would like to make 12 pairs of shorts for new children in school.
(a) How much cloth would he need to make the 12 pairs of shorts?
(2mrks)
(b) If such cloth costs sh. 3000 per metre, how much money will the tailor pay to buy it?
(2mrks)
29. Below is a trapezoidal vegetable garden. Use it to answer questions that follow.

(a) Find the value of $P$.
(b) Calculate the area of the garden.
(2mrks)
30. A sum of sh. 3700 was paid in coins of sh. 200 and sh. 500 making a total of 11 coins altogether. How many coins of sh. 200 were paid in?
(4mrks)
31. From village $K$, village $R$ is 70 km away on a bearing of $060^{\circ}$ and village T is 60 km away on a bearing of $150^{\circ}$ from village K .
(a) Draw a sketch to show the location of the three villages. (1mrk)
(b) Using a scale of 1 cm to represent 10 km , draw an accurate diagram for the location of the three villages.
(4mrks)
(c) Find the shortest distance from village R to village T .
32. The table below shows the buying and selling rates of foreign currencies in Ugandan shillings.

| currency | Buying | Selling |
| :--- | :--- | :--- |
| united states dollar(\$) 1 | Ush.3500 | Ush.3600 |
| Tanzanian shillings (Tz1) | Ush 25 | Ush.26 |
| Kenyan shillings (Ksh 1) | Ush.30 | Ush.32 |

(a) Mr. Omoro came with US\$200 from USA on a tour. How many Kenyan shillings did he come with?
(3mrks)
(b) Kamuntu bought a jacket at Tzsh.700. how much money is this in Ugandan money.
(2mrks)

