THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Primary School Education Assessment

MATHEMATICS

603

Nov. 2022 – 1 hour 20 minutes

INSTRUCTIONS TO CANDIDATES (Please read these instructions carefully)

1. You have been given this question booklet and a separate answer sheet. The question booklet contains 30 questions. Answer **all** the questions.

2. Do any necessary rough work in this booklet.

3. When you have chosen your answer, mark it on the **ANSWER SHEET**, not in this question booklet.

HOW TO USE THE ANSWER SHEET

4. Use an ordinary pencil.

5. Confirm that the answer sheet that you have been provided with has the following:

   YOUR ASSESSMENT NUMBER
   YOUR NAME
   NAME OF YOUR SCHOOL
   NAME OF SUBJECT

6. Do not make any marks outside the boxes.

7. Keep the sheet as clean as possible and do not fold it.

8. For each of the questions 1–30, four answers are given. The choices are lettered A, B, C and D. In each case only **ONE** of the four choices is correct. Choose the correct answer.

9. On the answer sheet, show the correct answer by drawing a **dark line** inside the box in which the letter you have chosen is written.

Example:

In the Question Booklet:

11. Work out $9 + 2 \times 18 - 2$?

   A. 196
   B. 176
   C. 43
   D. 27

The correct answer is C (43)

On the answer sheet:

In the set of boxes numbered 11, draw a **dark line** inside the box with the letter C printed in it as indicated below.

| 11 | [A] | [B] | [C] | [D] |

10. Your **dark line MUST** be within the box.

11. For each question, **ONLY ONE** box is to be marked in each set of four boxes.

This Question Paper consists of 10 printed pages.

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318958

Turn over

Working Space

1. The number of people in a certain county is five hundred and sixty five thousand and fifty two.

   What is the number in symbols?

   A. 506552
   B. 565502
   C. 565052
   D. 560052

2. The number of loaves of bread produced by a factory in a certain year was 3624817.

   What is the place value of digit **6** in the number?

   A. Millions
   B. Hundreds of thousands
   C. Thousands
   D. Tens of thousands

3. A bookshop received 648205 exercise books from a supplier. A school bought 76102 of the exercise books.

   How many books remained in the bookshop?

   A. 724307
   B. 672103
   C. 532103
   D. 572103

4. At the beginning of the year, there were 1204 girls and 816 boys in a school. During the year, 88 more girls joined the school and 12 boys left the school.

   What was the total number of learners in the school at the end of the year?

   A. 2096
   B. 2108
   C. 2120
   D. 2220

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5. A lorry carried 1452 cartons of textbooks. Each carton had 24 textbooks.

   How many textbooks did the lorry carry altogether?

   A. 1476
   B. 8812
   C. 34848
   D. 52448

6. A carpenter made a drawing. The drawing consists of a rectangle and a triangle as shown.
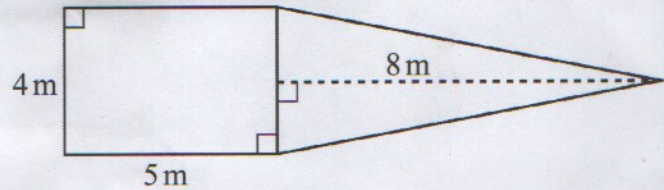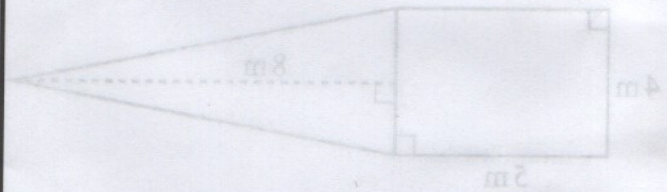
   What is the area of the drawing?

   A. 160 m²
   B. 36 m²
   C. 20 m²
   D. 16 m²

7. A teacher wrote on the blackboard the following pattern.

   30 , 32 , 36 , 44 , 60 , _____

   What is the next number in the pattern?

   A. 32
   B. 72
   C. 92
   D. 104

8. 4K club had 2156 chicks. The chicks were distributed equally among 15 members.

   How many more chicks will the 4K club add for all the members to get an equal share?
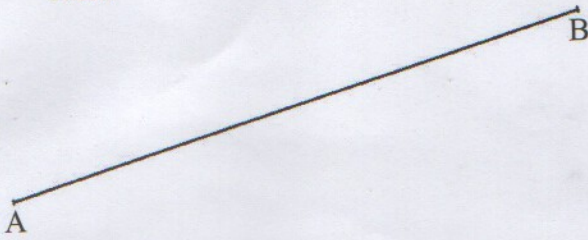
   A. 4
   B. 11
   C. 143
   D. 144

9. Musa drew a rectangle and a square. The rectangle had a length of 24 cm and width of 6 cm. The rectangle had the same area as the square.

   What was the perimeter of the square?

   A. 12
   B. 48
   C. 60
   D. 144

10. Mugambi and Kioko contributed some money to buy a piece of land. Mugambi contributed $\frac{3}{8}$ of the total cost of the land. Kioko contributed $\frac{2}{5}$ of the total cost.

    What fraction of the cost of land was **not** contributed?

    A. $\frac{9}{40}$

    B. $\frac{31}{40}$

    C. $\frac{3}{20}$

    D. $\frac{17}{20}$

11. A farmer divided his *shamba* into four portions. He planted cabbages on 0.25 of the *shamba*, tomatoes on 0.125 and onions on 0.45. He planted maize on the remaining portion.

    What percentage of the *shamba* was used for planting maize?

    A. 82.5
    B. 70.0
    C. 37.5
    D. 17.5

12. Ann bought 84.20 kg of kales from a grocer. She also bought 45.48 kg of kales from another grocer. She later used 15.93 kg of kales to prepare lunch.

    What mass, in kilograms, of kales did she remain with?

    A. 145.61
    B. 129.68
    C. 113.75
    D. 22.79

Working Space

13. A learner drew the following line. Measure the length AB in cm using a ruler.

What is the length of the line in millimetres?

A. 790
B. 79
C. 7.9
D. 0.79

14. Linda had 15 cartons. She packed 30 bottles of fruit juice in each carton. Each bottle contained 300 ml of juice.

What was the total amount, in litres, of the juice packed?

A. 135
B. 1350
C. 13500
D. 135000

15. A butcher had 1.4 tonnes of meat in a butchery. He cut the meat into pieces of 500 g each. He sold each piece for sh 110.

How much money did he get from the sale of all the meat?

A. sh 3 080 000
B. sh 308 000
C. sh 30 800
D. sh 3 080

16. Two farmers delivered wheat to a factory. One farmer delivered 40 tonnes 800 kilograms of wheat and the other farmer delivered 15 tonnes 520 kilograms of wheat.

How many tonnes and kilograms of wheat was delivered altogether?

A. 25 tonnes 280 kilograms
B. 55 tonnes 320 kilograms
C. 56 tonnes 120 kilograms
D. 56 tonnes 320 kilograms

17. An empty lorry of 12 tonnes. The truck carried 500 bags of maize. Each bag of maize had a mass of 90 kg.

What was the total mass, in tonnes, of the loaded truck?

A. 33
B. 45
C. 57
D. 602

18. A farmer bought a cow for sh 35 000. He spent sh 10 500 in taking care of it. He later sold the cow for sh 65 000.

How much profit did he make?

A. sh 19 500
B. sh 30 000
C. sh 54 500
D. sh 110 500

19. The table below shows the travel timetable for a bus company from town P to R.

Town	Arrival time	Departure time
P		9.00 a.m.
Q	11.30 a.m.	12 noon
R	3.30 p.m.	

Halima travelled from town P to R using the bus.

How long did the journey take?

A. 3 hours
B. 4½ hours
C. 6½ hours
D. 5½ hours

20. Ali closes his shop daily at thirty five minutes past six in the evening.

What time in a 24 hour clock system, does he close the shop?

A. 1835 h
B. 1235 h
C. 0635 h
D. 0035 h

17. An empty truck has a mass of 12 tonnes. The truck carried 500 bags of maize. Each bag of maize had a mass of 90 kg.

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B. $4\frac{1}{2}$ hours

C. $6\frac{1}{2}$ hours

D. $5\frac{1}{2}$ hours

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What time in a 24 hour clock system, does he close the shop?

A. 1835 h
B. 1235 h
C. 0635 h
D. 0035 h

21. A given number of lorries collected 28 tonnes 685 kilograms of garbage from the market. The garbage was loaded equally onto 5 similar lorries.

How many kilograms of garbage did each lorry carry?

A. 193
B. 697
C. 6970
D. 5737

22. The price list for a shop is shown below.

Item	Cost
1 kg sugar	sh 110
1 litre cooking oil	sh 360
2 kg packet maize flour	sh 105

Nyaboke bought 3 kg of sugar, 1 litre of cooking oil and 4 packets of maize flour from the shop. She gave the shopkeeper 3 five hundred shilling notes.

What was the balance?

A. sh 390
B. sh 945
C. sh 1 110
D. sh 2 610

23. Sandra requires 40 m 20 cm of barbed wire to fence her garden. She had two pieces of barbed wire measuring 11 m 85 cm and 8 m 90 cm.

How much more length of barbed wire does Sandra require?

A. 60 m 95 cm
B. 27 m 75 cm
C. 19 m 55 cm
D. 19 m 45 cm

24. A salesperson had 24 litres of milk. She packed the milk in 500 ml and 250 ml bottles. She packed three quarters of the milk in 500 ml bottles and the rest in 250 ml bottles.

What was the total number of bottles she used?

A. 60
B. 36
C. 32
D. 24

25. The figure below shows two triangles drawn accurately. Measure the angle SQR using a protractor.

What is the size of angle SQR?
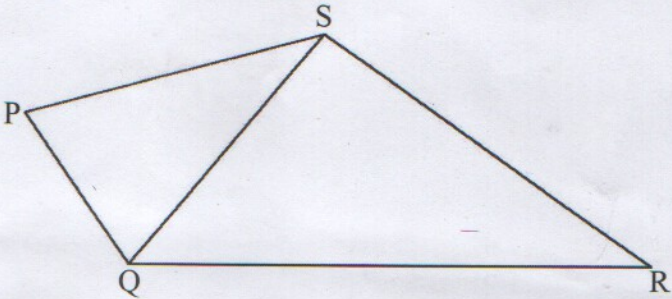
A. 35°
B. 50°
C. 70°
D. 95°

26. Kigen bought goods worth sh 400. He gave the shopkeeper a sh 1 000 note.

He received the balance in equal number of sh 200 and sh 100 notes.

What was the total number of notes that he received?

A. 3
B. 4
C. 5
D. 6

27. A bus and a matatu were to transport 128 guests to a wedding ceremony. The bus can carry 24 guests and the matatu 8 guests. Both vehicles made the same number of trips.

How many trips did the matatu make?

A. 2
B. 4
C. 8
D. 16

28. The bar graph below represents the number of trees planted by learners of a school in four years.
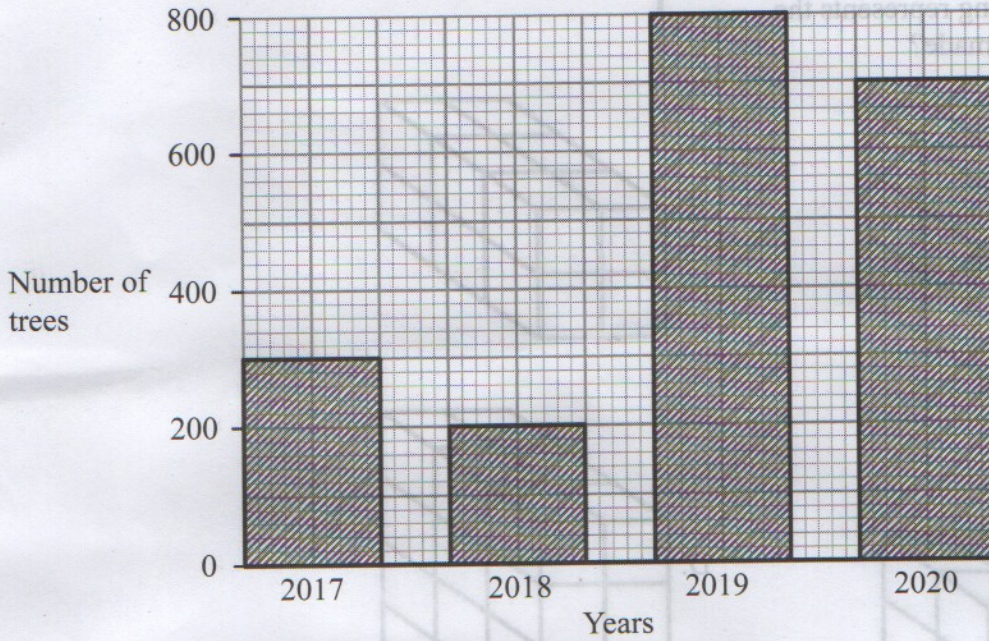
What is the difference between the highest and lowest number of trees that were planted in the four years?

A. 800
B. 700
C. 600
D. 200

29. Charo and Akinyi have some bananas. Charo has three times as many bananas as Akinyi. They have 36 bananas altogether. Let the number of bananas that Akinyi has be represented by y.

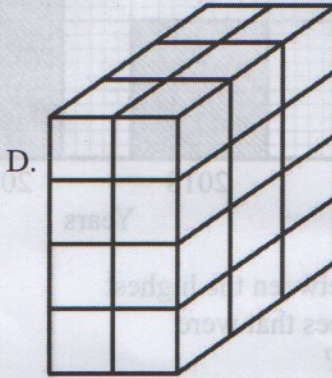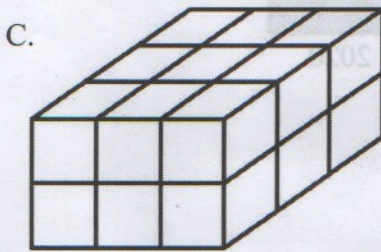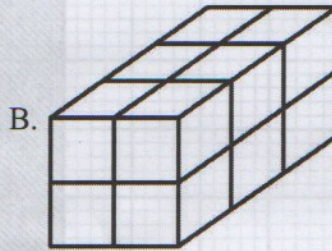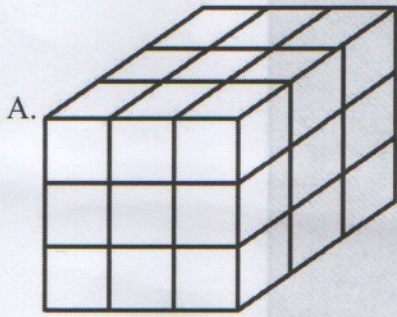Which of the following equations correctly represents the information given?

A. $3y + y = 36$
B. $y + y + y = 36$
C. $y + y + 3 = 36$
D. $\frac{y}{3} + 3 = 36$

30. Mwakio had 18 cubes with the same shape and size. He made a stack using all the cubes.

Which of the following represents the correct stack that he made?

A.

B.

C.

D.