

THE KENYA NATIONAL EXAMINATIONS COUNCIL

MIRITINI YOUNG STARS ACADEMY

Kenya Primary School Education Assessment

MATHEMATICS

Grade 6

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.
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 choices 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 from the choices.
9. On the answer sheet, the correct answer is to be shown 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 $2 \times 18 + 7$

A. 252

C. 43

B. 50

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 11 printed pages

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1. Sheila a grade six pupil wrote the number shown below on the wall.

286410

Write the number that Sheila drew in words:

- A. Two eighty six thousands four ten
- B. Two eighty six thousands four hundred and ten
- C. Two hundred and eighty six thousands four hundred and ten
- D. Two thousand and eighty six four hundred and ten
2. Grade six pupil were contributing money for a school trip, they raised Kshs.2500. That same day Kshs.686 got lost. They later raised Kshs.1600. How much money did they have in total?
- A. 4100
- B. 4786
- C. 214
- D. 3414
3. Jamillah a grade six pupil paid her own school fee as well as that of her sister as shown below:

Kshs.3412

Kshs.2527

What is the total school fees paid by Jamillah to the nearest thousands?

- A. 6000
- B. 5939
- C. 885
- D. 5000

4. Work out

$$\sqrt{324}$$

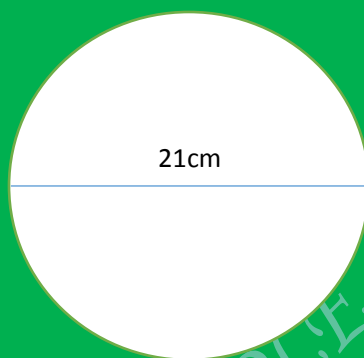
A. 162

B. 648

C. 18

D. 14

5. The figure below shows a circle of diameter 21cm.



Find the circumference of the circle. ($\pi = \frac{22}{7}$)

A. 132 cm

B. 66 cm

C. 132 cm²

D. 66 cm²

6. Grade six at Palm Breeze Academy has 25 pupils. Girls in that school are 13 while the rest of the pupils are boys. What is the percentage of boys in that school?

A. 52%

B. 38%

C. 13%

D. 52%

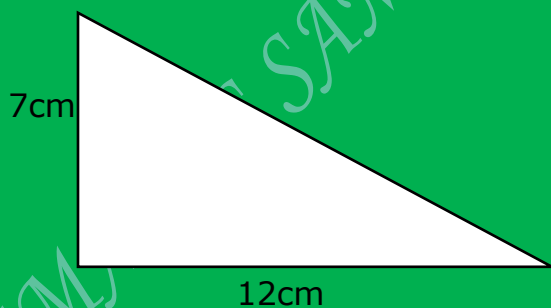
7. When Joab was called by the Math's teacher, he moved straight and then turned at an angle of 60° to meet the teacher. Find the fraction walked by Joab in order to meet the teacher.

A. $\frac{1}{6}$ turn
B. $\frac{1}{2}$ turn
C. $\frac{1}{4}$ turn
D. $\frac{2}{3}$ turn

8. Work out $6 \times 4 + 2 - 1$

A. 24
B. 25
C. 30
D. 23

9. Rian saw the shape shown below on the roof of a class.



Find the area of the shape seen by Rian.

A. 35cm^2
B. 42cm^2
C. 19cm^2
D. 84cm^2

10. A square room was measured by grade 5 pupils and was found to have a length of 12m. What is the area of the room?

- A. 24 cm^2
- B. 144 cm^2
- C. 24 m^2
- D. 144 m^2

11. Mwanashika ran on a track shown below 5 times.



If the track measures 3m 55cm. What distance did Mwanashika run?

- A. 1m 11cm
- B. 15m 75cm
- C. 17m 75cm
- D. 7m 10cm

12. Arrange the following fractions in ascending order $\frac{1}{4}, \frac{2}{3}, \frac{4}{7}, \frac{1}{2}$

A. $\frac{4}{7}, \frac{2}{3}, \frac{1}{4}, \frac{1}{2}$

B. $\frac{2}{3}, \frac{4}{7}, \frac{1}{2}, \frac{1}{4}$

C. $\frac{1}{4}, \frac{1}{2}, \frac{4}{7}, \frac{2}{3}$

D. $\frac{1}{4}, \frac{2}{3}, \frac{4}{7}, \frac{1}{2}$

13. Deborah a grade six pupil was asked the mass of a car and a *tuktuk* and her answer is shown below:

<u>Car</u>	<u>Tuktuk</u>
18t 455kg	10t 689kg

Find the sum of the mass of the Car and *Tuktuk*

A. 29t 144kg

B. 29t 145kg

C. 28t 1145kg

D. 28t 145kg

14. Emmanuel has some money. Abel has the same amount of money as Emmanuel. Naomi has Kshs.20. How much money do they have altogether.

A. $2x + 20$

B. $x + 20$

C. $x + x$

D. $20x$

15. The number displayed below was shown by the math's teacher during a class lesson:

122.4568

What is the place value of 6 in the number displayed?

- A. Hundredth
- B. Thousandth
- C. Hundreds
- D. Thousands

16. Salma visited her relative and stayed there for 16 days. How many weeks and days did Salma stay at the relatives place?

- A. 1week 16days
- B. 2weeks 3days
- C. 1week 2days
- D. 2weeks 2days

17. Work out the value of y

$$7y = 21$$

- A. 28
- B. 147
- C. 3
- D. 5

18. The number of HIV/AIDS infections in Vikobani village was said to be 40%.

What is the number of infections in fraction form?

- A. $\frac{1}{2}$
B. $\frac{4}{100}$
C. $\frac{1}{25}$
D. $\frac{2}{5}$

19. Kimberly a grade six student was sent to buy the following items:

2kg of sugar	Kshs.125
1 bread	Kshs.60
Coffee	Kshs.100
Margarine	Kshs.50

How much balance was Kimberly given if she gave the shopkeeper a one thousand note?

- A. 335
B. 665
C. 165
D. 330
20. Work out to get the value of m

$$\frac{m}{4} = 8$$

- A. 2
B. 12
C. 32
D. 4

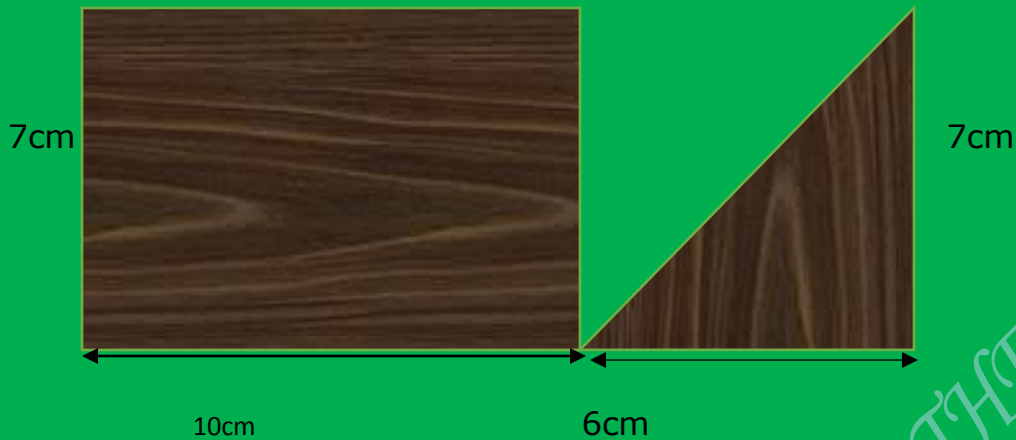
21. A pupil from Malaika Academy arranged the following numbers from the largest to the smallest as shown below.

0.45, 3.56, 4.56, 2.45, 1.01

The pupil was told by the teacher to do correction. What answer was the pupil supposed to give?

- A. 4.56,2.45,1.01,3.56,0.45
 - B. 4.56,3.56,2.45,1.01,0.45
 - C. 0.45,3.56,4.56,2.45,1.01
 - D. 1.01,2.45,4.56,3.56,0.45
22. What is the number 0.4 when converted into percentage?
- A. 4%
 - B. 100%
 - C. 40%
 - D. $\frac{4}{10}\%$
23. Florence a grade six pupil packed 44 books into a carton. She packed 15 cartons. What is the total number of cartons that Florence packed?
- A. 59
 - B. 550
 - C. 660
 - D. 440

24. Find the area of the shape below:



- A. 30cm^2
B. 34 cm^2
C. 41 cm^2
D. 91 cm^2
25. What is the next missing number in the pattern

5, 6, 8, 12, 20.....

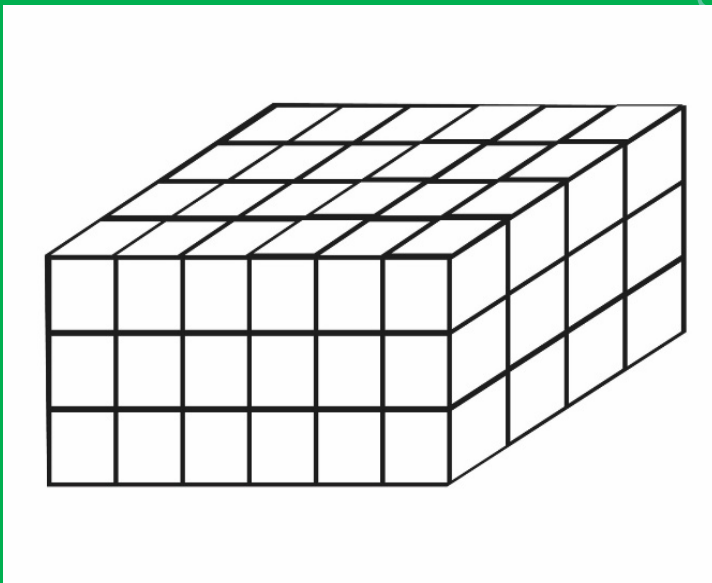
- A. 36
B. 16
C. 21
D. 32
26. Elder Musa divided his piece of land .One third of the farm was for planting potatoes, a quarter of the land was for panting tomatoes and the remaining piece of land was for planting kales. Find the fraction in which he planted kales.

- A. $\frac{1}{12}$
B. $\frac{5}{7}$
C. $\frac{1}{4}$
D. $\frac{1}{3}$

27. Write the time shown below in words.

11:51 A.M

- A. Nine minutes to noon
B. Eleven fifty One
C. Fifty One minutes past eleven
D. Nine minutes to midnight
28. How many boxes are in the stack below



- A. 54
B. 24
C. 72
D. 18

29. A grade 5 pupil was thinking of an odd number. He doubled the odd number and found an even number divisible by both 2 and 5.

What was the number?

- A. 20
- B. 10
- C. 5
- D. 4
- E. 2

30. Work out

$$\frac{1}{2} + \frac{3}{4}$$

- A. $1\frac{1}{4}$
- B. $\frac{3}{6}$
- C. $\frac{10}{8}$
- D. $\frac{4}{6}$