

# DOYEN PUBLISHERS

## KENYA JUNIOR SCHOOL EDUCATION ASSESSMENT



### END TERM I 2025 JOINT EXAM

### GRADE 8 - MATHEMATICS

Time: 2 hours

NAME: \_\_\_\_\_

SCHOOL: \_\_\_\_\_

STREAM: \_\_\_\_\_ DATE: \_\_\_\_\_

#### INSTRUCTIONS

- Write your name, school, stream and date in the spaces provided above.
- Answer **ALL** questions in this booklet.
- All answers must be given as per the guidelines of the questions.
- This question paper consists of **TWO** sections: **A** and **B**.
- Answer **ALL** the questions in section A in the table below.
- Answer **ALL** the questions in section B by working out in the spaces provided after each question.
- Show all the workings in section B in the spaces provided.
- Non-programmable calculators may be used, except where stated otherwise.
- Give non-exact numerical answers, correct to 3 significant figures and one decimal place for angles in degrees, unless a different level of accuracy is specified in the question.
- For  $\pi$ , use either the calculator value or 3.142.

#### ANSWER SHEET - SECTION A

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.

#### LEARNER'S SCORE

SCORES		TOTAL
A (Out of 20)		
B (Out of 80)		

*This paper consists of 9 printed pages. Candidates should check the question paper to confirm that all pages are printed as indicated and that no questions are missing.*

# SECTION A (20 marks)

Write your answers in the table provided on the first page

Working Space

1. Which one of the following numbers is one hundred and two thousand and eight hundredths?

A. 100200.08      C. 102.08  
B. 102000.08      D. 102000.80

2. What is the value of:  $(+2) - (9) + (2) =$

A. 13      B. -5      C. 5      D. -13

3. A hole is dug such that its depth is increased by 3m per day. After the fifth day, it is refilled with soil by 2m. Determine its final depth.

A. 15m      B. 17m      C. 14m      D. 13m

4. What is the total value of the digit 7 in the number 42765831?

A. 7,000      C. 700,000  
B. 70,000      D. 7,000,000

5. What is the value of  $3(0.6^2 - 0.2^2) + 2.4 \div 0.8$

A. 3.96      B. 4.04      C. 4.2      D. 5.4

6. How many days were there from 1st January to 31st March, 2012?

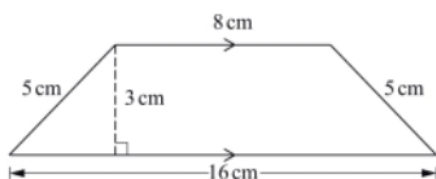
A. 89      B. 90      C. 91      D. 92

7. Work out:

$$\frac{4}{9} \div \frac{4}{63} + 3\frac{1}{2} \times \frac{1}{2} - 3\frac{7}{12} =$$

A.  $5\frac{1}{6}$       B.  $5\frac{9}{12}$       C.  $5\frac{16}{23}$       D.  $5\frac{7}{23}$

8. What is the area of the figure shown below?



A.  $24 \text{ cm}^2$       B.  $36 \text{ cm}^2$       C.  $34 \text{ cm}^2$       D.  $40 \text{ cm}^2$

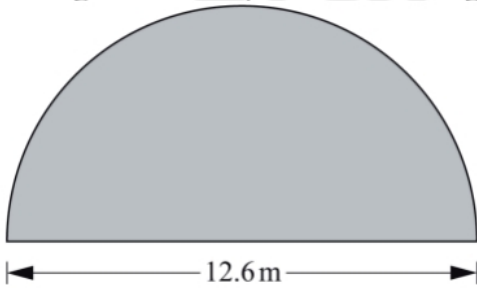
9. What is 1844.056 when rounded off to two decimal places?

A. 1844.05      C. 1844.10  
B. 1844.00      D. 1844.06

10. What is the difference between the L.C.M. and the H.C.F. of the numbers 18, 24 and 72?

A. 6      B. 66      C. 72      D. 78

11. Odhiambo used  $\frac{1}{8}$  of his plot of land as homestead,  $\frac{1}{3}$  for flowers,  $\frac{1}{4}$  for nappier grass and the remainder for vegetables. If the area for vegetables was  $280 \text{ m}^2$ , what was the area for flowers?  
A.  $120 \text{ m}^2$  B.  $240 \text{ m}^2$  C.  $320 \text{ m}^2$  D.  $960 \text{ m}^2$
12. Beka harvested 6 bags of beans and 8 bags of maize. He sold each bag of beans at sh 4,800 and each bag of maize at sh 1,500. How much money was left after paying sh 24,500 for school fees?  
A. sh 4,300 C. sh 48,800  
B. sh 16,300 D. sh 65,300
13. The figure below represents a flower garden.



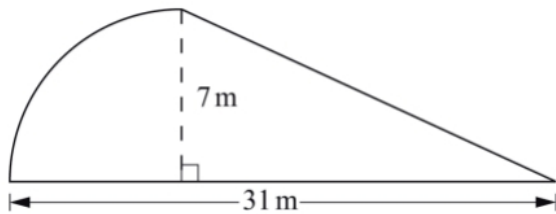
- The garden is to be fenced all around using four strands of wire. With the help of your calculator, determine the length of the wire required, in meters. (Take  $\pi = \frac{22}{7}$ )  
A. 208.8 B. 129.6 C. 79.2 D. 32.4
14. On a certain day, a shopkeeper sold 6 rulers, 15 rubbers, 24 pencils and 9 exercise books. If these items were to be represented in a pie chart, what angle would represent the number of exercise books?  
A.  $160^\circ$  B.  $100^\circ$  C.  $60^\circ$  D.  $40^\circ$
15. Which number is divisible by 11?  
A. 2794 B. 4966 C. 7195 D. 3435
16. What is the value of  $x$  in the equation:  
 $\frac{2}{3}(2x + 4) + 6 = 10$   
A. 5 B. 4 C. 2 D. 1
17. Stella left town P at 7:00 am and traveled to town R, a distance of 320 km via town Q. She took two hours to travel from town P to town Q at an average speed of 85 km/h. After a 45-minute rest, she continued with the journey at an average

speed of 75 km/h. At what time did she arrive at town R?

- A. 11:45 am                      C. 9:45 am  
B. 11:00 am                      D. 9:00 am

**Working Space**

18. The figure below represents a flower garden in the shape of a quarter of a circle with a radius of 7 m and a right-angled triangle.



Find the area of the flower garden? (Take  $\pi = \frac{22}{7}$ )

- A. 95 m<sup>2</sup>    B. 108 m<sup>2</sup>    C. 122 m<sup>2</sup>    D. 147 m<sup>2</sup>
19. Khalifa bought 5 trays of eggs at sh 200 each. All eggs in one of the trays broke, and he sold the remaining trays at sh 210 each. What percentage loss did he make?
- A. 5%    B. 84%    C. 19.21%    D. 16%
20. A square plot has an area of 272.25m<sup>2</sup>. Using a calculator, determine its length.
- A. 16    B. 16.5    C. 17.5    D. 17

### SECTION B (80 marks)

*Work out in the spaces provided after each question.*

21. Work out the following using number lines.

a)  $(-6) + (5)$

(3 marks)

b)  $(-2) - (-3) - (-4)$

(3 marks)

c)  $(+7) - (10)$

(3 marks)

d)  $(+6) - (2)$

(3 marks)

e)  $(+6) + (3) + (1)$

(3 marks)

22. Work out the following.

a)  $5\frac{5}{6} + 1\frac{2}{5} - 4\frac{1}{3}$

(3 marks)

b)  $1\frac{7}{8} - 2\frac{1}{3} + 4\frac{1}{12}$

(3 marks)



c)  $2\frac{1}{2} + 1\frac{1}{3} \times 1\frac{1}{6} \div 2\frac{2}{3} - \frac{3}{4}$

(4 marks)

23. Convert the following fractions to decimals.

a)  $\frac{163}{1000}$

(2 marks)

b)  $\frac{2}{250}$

(2 marks)

c)  $\frac{3}{8}$

(2 marks)

d)  $10\frac{4}{5}$

(2 marks)

e)  $20\frac{2}{5}$

(2 marks)

24. Convert the following decimals to fractions in their simplest forms.

a) 0.125

(2 marks)

b) 0.82

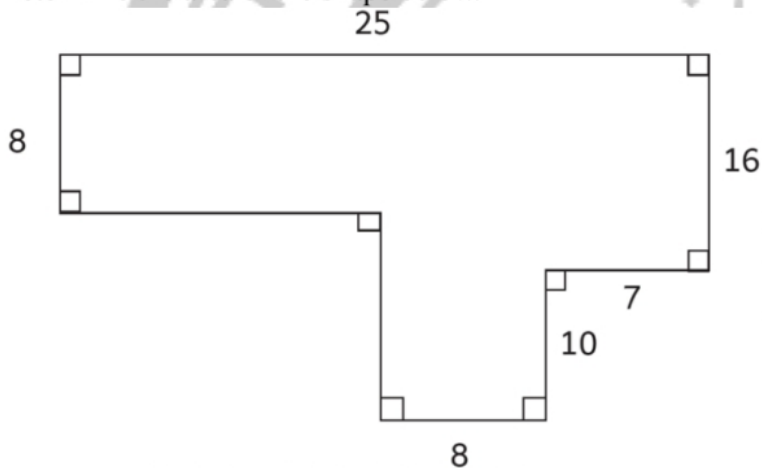
(2 marks)

(2 marks)

(2 marks)

(2 marks)

(5 marks)



(2 marks)

(2 marks)

(2 marks)

c) How much profit did she get from selling all the necklaces.

(3 marks)

d) Calculate the percentage profit.

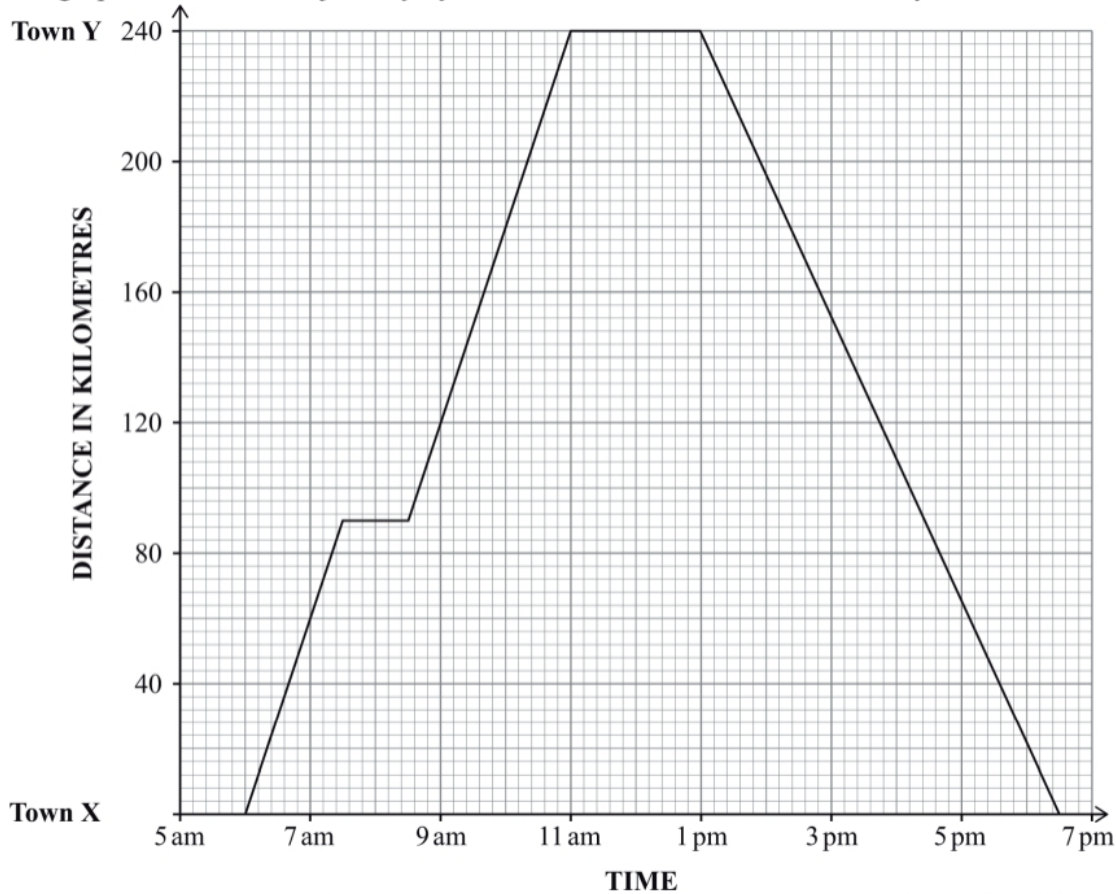
(2 marks)

27. Using a pair of compasses and a ruler only, construct angle measuring  $45^\circ$ .

(10 marks)



28. The graph below shows a journey by bus from town X to Y and back. Study it and answer the questions below.



a) Find the distance that the bus had covered at:

i) 6am

(2 marks)

ii) 7am

(2 marks)

iii) 10am

(2 marks)

b) How did the:

i) First stop last

(2 marks)

ii) Second stop last

(2 marks)

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