

**EMBU COUNTY PRE - MOCK EXAMS**  
**STANDARD EIGHT - YEAR 2019**  
**MATHEMATICS**

Time : 2 Hours

**READ THESE INSTRUCTIONS CAREFULLY**

1. You have been given this question paper and a separate answer sheet. The question paper contains 50 questions.
2. Do any necessary rough work in this paper.
3. When you have chosen your answer, mark it on the **ANSWER SHEET**, not in this question paper.

**HOW TO USE THE ANSWER SHEET**

4. Use an ordinary pencil only.
5. Make sure that you have written on the answer sheet.

**YOUR INDEX NUMBER**  
**YOUR NAME**  
**NAME OF YOUR SCHOOL.**
6. By drawing a **DARK LINE** inside the correct numbered boxes mark your full Index Number (i.e. School Code Number and the three- figure Candidate's Number) in the grid near the top of the answer sheet.
7. Do not make any marks outside the boxes.
8. Keep the sheet as clean as possible and do not fold it.
9. For each of the questions 1 - 50 four answers are given. The answers are lettered A, B, C, D. In each case only **ONE** of the four answers is correct. Choose the correct answer.
10. 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 Paper.**

- 14.** Round off 296 to the nearest hundred.

- A. 300  
B. 290  
C. 200  
D. 250

The correct answer is A. (300).

**On the answer sheet:**

**1.** [A][B][C][D]   **7.** [A][B][C][D]   **14.** ~~[A]~~[B][C][D]   **24.** [A][B][C][D]   **34.** [A][B][C][D]

In the **Third** set, the box with the letter **A** printed in it is marked.

11. Your dark line **MUST** be within the box.
12. For each question **ONLY ONE** box is to be marked in each of four boxes.

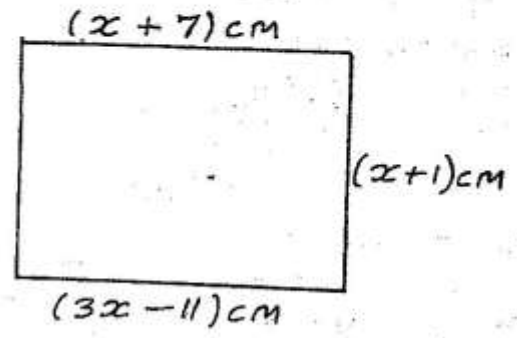
**This Question Paper consists of 8 Printed pages**

*Candidates should check the question paper to ensure that all the pages are printed and no questions are missing.*

TURN OVER

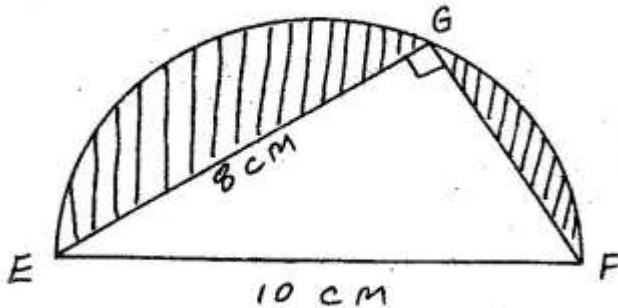
- Write **3467826.016** in words
  - Three million four hundred and sixty seven thousand eight hundred and twenty six point zero sixteen
  - Three million four hundred and sixty seven thousand eight hundred and twenty six and sixteen hundredths
  - Three million four hundred and sixty seven thousand eight hundred and twenty six and sixteen thousandths
  - Thirty four million six hundred and seventy eight and twenty six and sixteen thousandths
- Round off **8996574** to the nearest ten thousands
  - 9096000
  - 8990000
  - 8090000
  - 9000000
- What is the value of:  $\frac{2(6^2 + 4^2) - 8}{2(7 - 5)}$ 
  - 18
  - 2
  - 24
  - 14
- What is the value of digit **9** in the number **35970821**?
  - 9000
  - Nine hundred thousand
  - Hundred thousands
  - 9000000
- What is the smallest number that can be added to **43569** to make it divisible by **11**?
  - 9
  - 3
  - 2
  - 4
- What is the value of:  $2\frac{2}{3} + 1\frac{1}{8} + 2\frac{1}{4} - \frac{1}{5} \times \frac{1}{4}$ 
  - $1\frac{1}{11}$
  - $1\frac{1}{12}$
  - $1\frac{1}{12}$
  - $1\frac{5}{24}$

- Express  **$33\frac{1}{3}\%$**  as a ratio in its simplest form
  - $\frac{100}{3}$
  - 100 : 3
  - 300 : 100
  - 1 : 3
- Which one of the following is the possible value of **x** in:  $8x + 6(2x - 4) < 16$ 
  - $x = 1$
  - $x > 2$
  - $x = 0$
  - $x < 2$
- What is the perimeter of the figure below?



- 42cm
  - 26cm
  - 52cm
  - $52 \text{ cm}^2$
- What is twice value of:  $\frac{0.24 \times 3.6 \times 0.18}{0.09 \times 0.12 \times 1.2}$ 
    - 24
    - 12
    - 1.2
    - 2.4
  - What is **340068** divided by **17**?
    - 20004
    - 2004
    - 204
    - 24
  - What is the difference between the LCM of **12** and **24** and the GCD of **54** and **36**?
    - 42
    - 24
    - 18
    - 6
  - A children's home was supplied with **40** cartons of milk. Each carton contained **60** two hundred millilitre packets of milk. How many litres of milk were supplied?
    - 2400L
    - 480L
    - 4800L
    - 240L

14. Find the area of the unshaded part in the figure below, (take  $\pi$  as = 3.14)



- A.  $39.25\text{cm}^2$       B.  $24\text{cm}^2$   
 C.  $15.25\text{cm}^2$       D.  $63.25\text{cm}^2$
15. Construct triangle XYZ such that  $XY = 7.2\text{cm}$ ,  $YZ = 5.8\text{cm}$  and  $ZX = 6.2\text{cm}$ . Draw a circle passing through the vertices. What is twice the radius of the circle?
- A. 1.7cm      B. 3.8cm  
 C. 3.4cm      D. 7.6cm
16. A shopkeeper donated 5 tonnes of sugar to families in a village. Each family received 2.5kg of sugar. How many families benefited?
- A. 2000      B. 200  
 C. 20 000      D. 20
17. Mr. Kanake deposited shs. 80 000 in a financial institution that paid simple interest at a certain rate. At the end of 3 years he withdrew money amounting to shs. 92 000. At what rate was the interest paid?
- A.  $38\frac{1}{2}\%$       B. 15%  
 C. 5%      D.  $4\frac{8}{23}\%$
18. Utugi woke up at 6:15am after sleeping for 8hours 45mins. At what time had he started sleeping in 24hour clock system?
- A. 2130hrs      B. 0930hrs  
 C. 2030hrs      D. 8.30pm

19. 61 electric poles are fixed at an equal interval of 35m. What distance does Murengi cover if he runs from the first pole to the last and back?

A. 2100m      B. 4200m  
 C. 2101m      D. 4202m

20. What is the value of x in:

$$3(2x + 1) + 5(x + 4) = 61$$

A.  $8\frac{11}{11}$       B.  $3\frac{5}{11}$   
 C.  $7\frac{7}{11}$       D.  $5\frac{1}{11}$

21. How many groups of 1000 are in the value of digit 6 in 896423?

A. 600      B. 6000  
 C. 6      D. 60

22. Twenty five squares each of area  $3\frac{5}{25}\text{m}^2$  were joined to form one big square. What was the perimeter of the big square formed?

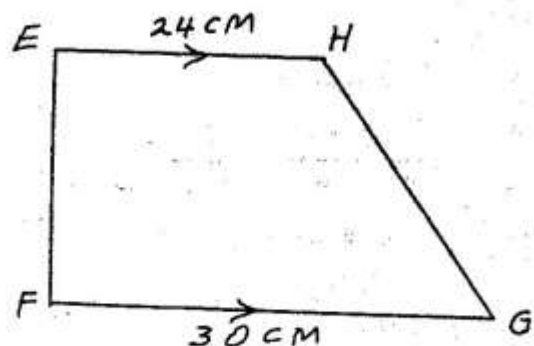
A. 36m      B. 72m  
 C.  $7\frac{1}{5}\text{m}$       D. 9.5m

23. What is the sum of the next two numbers in the pattern below?

6, 7, 13, 20, \_\_\_\_\_, \_\_\_\_\_

A. 33      B. 53  
 C. 65      D. 88

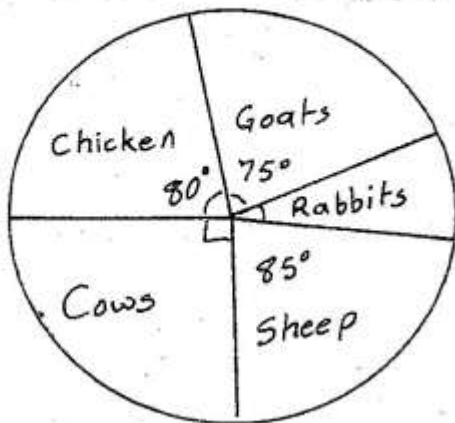
24. Find twice the length of line GH in the figure below. Given that it is a trapezium with an area of  $216\text{cm}^2$



A. 6 cm      B. 5 cm  
 C. 20 cm      D. 12 cm

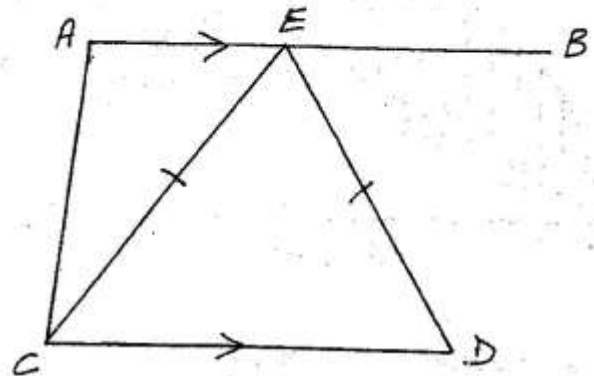


25. The level of water in a tank was decreasing by 20% each day. If the level of water was 2500cm. what will be the level of water after three days?
- A. 1280cm                      B. 1500cm  
C. 1000cm                      D. 1220cm
26. A wheel covers a distance of 88m after making 100 revolutions. What is the radius of the wheel?
- A. 0.28m                      B. 0.14m  
C. 1.4m                      D. 2.8m
27. The pie chart below shows the number of animals in Naomi's farm. There are 75 goats. How many less rabbits than sheep are there?



- A. 55                      B. 115  
C. 30                      D. 85
28. A rectangular container has a square base of sides 70cm. Its height is 1 m. How many litres does it hold when half full?
- A. 4900L                      B. 490L  
C. 2450L                      D. 245L
29. Prisca scored mean of 77% in five subjects. He scored 83% in the sixth test. What was his total marks?
- A. 385                      B. 297  
C. 468                      D. 478

30. In the figure below line AB is parallel to line CD. Angle ACE = ECD, line EC = ED. Line CE bisects angle ACD. What is the value of angle CED?



- A. 45°                      B. 135°  
C. 90°                      D. 100°
31. The table below shows number of pupils absent from a class of 24 pupils in a week.

Days	Mon	Tue	Wed	Thur	Fri
No. of pupils	1	3	0	2	4

33. What was the mean attendance for that week?
- A. 22                      B. 24  
C. 10                      D. 110
32. Find the total surface area of the walls of a room measuring 12m long, 8m wide and 4m high?
- A. 160 m<sup>2</sup>  
B. 352 m<sup>2</sup>  
C. 192 m<sup>2</sup>  
D. 176 m<sup>2</sup>

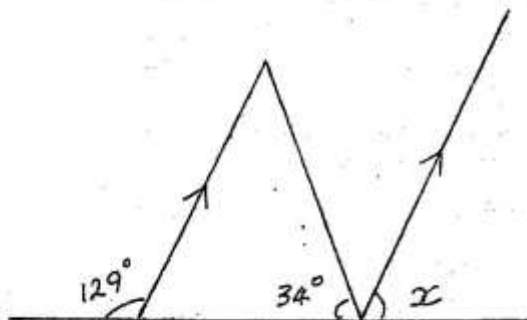
33. In an election, the winning candidate got 16000 votes while the second candidate got half as many votes as the winning candidate. Spoilt votes were as many as a quarter of the votes the second candidate got. How many votes were cast in that election?

- A. 24000                      B. 26000  
C. 32000                      D. 22000

34. Find the area of a rectangle whose perimeter is 1.2km and the width 400m. Give your answer in hectares.

- A. 80000ha                    B. 200ha  
C. 8ha                         D. 480ha

35. Find the value of X in the figure below.



- A. 129                         C. 17  
B. 95                         D. 51

36. What is the least number which when divided by 48, 64 and 80 leaves a remainder of nine in each case?

- A. 960                         B. 16  
C. 480                         D. 969

37. By how many times is the value of digit 2 more than the value of digit 5 in the number 70210538?

- A. 200000  
B. 200500  
C. 500  
D. 400

38. The table below shows distances between different towns in km.

45	B				
90	40	C			
125	45	30	D		
140	130	60	20	E	
160	150	95	40	30	F

What distance did Vanesa and Susan cover if they travelled from town A to town F via town C and back using the same route? A. 185 km                      B. 370 km

- C. 740 km                      D. 320 km

39. A tank was  $\frac{5}{12}$  full of water when 78 litres were added, it became  $\frac{2}{3}$  full. Find the capacity of the tank when full

- A. 312L                         B. 162L  
C. 180L                         D. 156L

40. The cash price of a TV set is 20% less than the hire purchase price which requires a deposit of shs. 4800 and 6 equal monthly installments of shs. 800 per month. Find the cash price?

- A. 11520                         B. 9600  
C. 8067                         D. 7680

41. Mr. Ndwiga bought the following items from the shop:

**3 - 2kg packets of maize flour at shs. 120 per packet**

**2  $\frac{1}{2}$  kg of meat @shs. 300 per kg**

**2 loaves of bread for shs. 90**

**2kg margarine@shs. 100 per 500g**

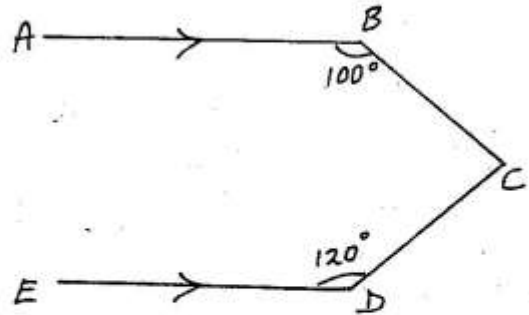
He paid using two - one thousand shillings notes. How much more did he add the shopkeeper in order to get a balance of shs. 500 note?

- A. shs. 400                      B. shs. 600  
C. shs. 100                      D. shs. 500



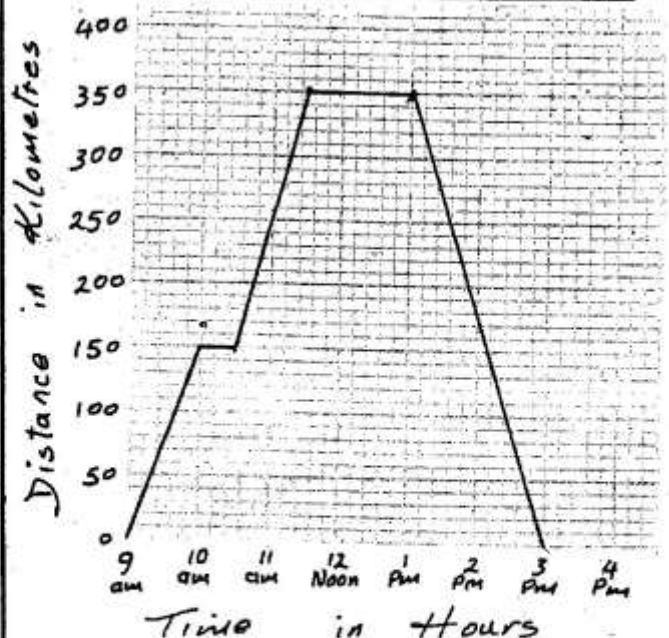
42. Convert 0.58 as a ratio in its simplest form  
 A. 58 : 100                      B. 29 : 50  
 C. 50 : 29                        D. 100 : 58
43. The total surface area of a closed cube is  $726\text{cm}^2$ . Calculate the volume of the cube in  $\text{cm}^3$   
 A.  $1331\text{cm}^3$   
 B.  $3375\text{cm}^3$   
 C.  $3660\text{cm}^3$   
 D.  $121\text{cm}^3$
44. Which one of the following sets of numbers will form a right angled triangle?  
 A. 2.5, 4, 6.5  
 B. 2.5, 6, 6.5  
 C. 4, 5, 6  
 D. 4, 6, 8
45. The length of a rectangular tank is 7.5 m and its width is 2.4m. The tank holds 27000L when half full. Find the height of the tank  
 A. 0.3m                              B. 3m  
 C. 1.5m                              D. 15m
46. Jane paid shs. 850 for a blouse after receiving a discount of 15%. How much should he have paid if he was given a discount of 5%?  
 A. shs. 950                          B. shs. 1000  
 C. shs. 5383                        D. shs. 500
47. Becky opened the school on 7<sup>th</sup> January and went home for holiday on 7<sup>th</sup> April 2009. For how many nights did she sleep in school?  
 A. 91                                    B. 92  
 C. 90                                    D. 93

48. In the figure below, line AB is parallel to ED. Angle PQR =  $100^\circ$  and  $ABC = 120^\circ$ . Find the size of the reflex angle BCD



- A.  $160^\circ$                               B.  $140^\circ$   
 C.  $12^\circ$                                 D.  $120^\circ$
49. The length of the two diagonals of a rhombus are 1.6m and 1.2. Calculate the area of the rhombus?  
 A.  $9.6\text{m}^2$                           B.  $0.96\text{cm}^2$   
 C.  $0.96\text{m}^2$                         D.  $9.6\text{cm}^2$

**The graph below shows Muturi's journey from town Nairobi to Nakuru and back. Use it to answer question 50**



50. What was his average speed on his way back?  
 A.  $116\frac{2}{3}\text{km/hr}$                       B.  $175\text{km/hr}$   
 C.  $140\text{km/hr}$                         D.  $350\text{km/hr}$