

**THE INTERNATIONAL SCHOOL  
(UNIVERSITY OF IBADAN)  
ENTRANCE EXAMINATION TO JS1**

**10<sup>TH</sup> MAY, 2008**

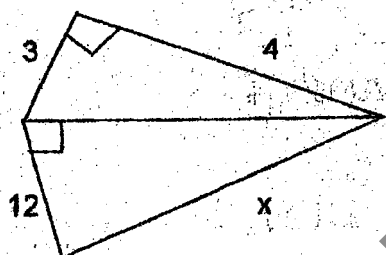
**SUBJECT: MATHEMATICS  
MINS**

**TIME: 1 HR. 15**

*Do not open this paper until you are told to do so. While you are waiting, read the following instructions carefully*

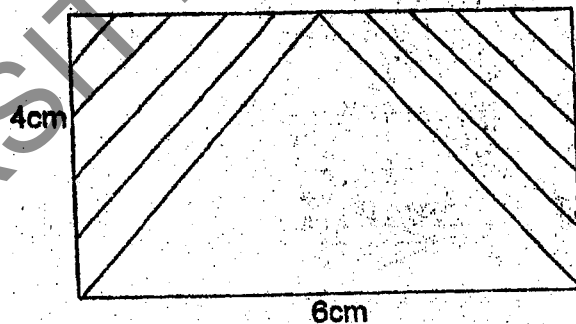
- a. Write your NUMBER and NAME in the space provided at the top of the answer sheet, putting your SURNAME first in capital letters.
- b. You must only use a pencil to SHADE the entire box. DO NOT TICK.
- c. Think carefully before choosing your answer to each question. When you have made your choice, look for the answer sheet of the question, then find the letter of the answer you have chosen, and shade in your answer.
- d. If you want to change an answer you must erase it completely, then shade in the new answer.
- e. Work as fast and as carefully as you can. When you have finished one page, go straight on to the next. The total number of questions is 50
- f. Candidates should use only the answer sheet provided by the Invigilator. No other answer sheet will be accepted. All rough work must be done on the Question paper.
- g. Submit your answer sheet to your invigilator.

- Simplify. MCDXXII- DCXXII  
(A) MC (B) M (C) DCCC (D) C
- What is the sum of  $6^2$ ,  $2^3$  and  $\sqrt{3611}$ ?  
(A) 20 (B) 22 (C) 36 (D) 63
- Calculate the simple interest on N7, 200 for three months at 7% per annum  
(A) N98.3 (B) N118 (C) N112.50 (D) N126
- The value of 3 in 26.635 is  
(A) 3 millionths (B) 3 thousandth (C) 3 hundredths (D) 3 tenths
- 



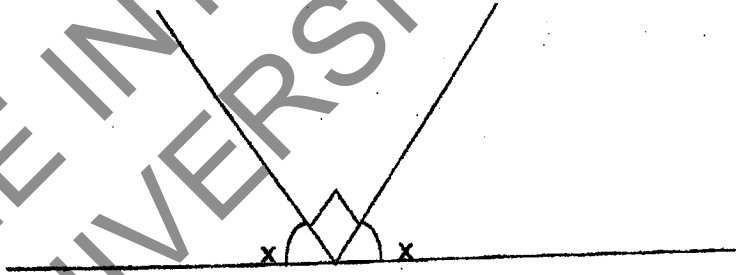
In the diagram above find the value of X

- (A) 5 (B) 12 (C) 13 (D) 26
- Simplify  $42x^3$  divided by  $4x^{-7}$   
(A)  $3x^{-10}$  (B)  $3x^{-7}$   
(C) 3 (C) 3
- Given that  $R = 15$ , evaluate the  
(A) 6  
(C) 9
- What is the shaded portion of square cm?  
 $x^4$



= 9, T = 3 and S  
root of  $R^2 - ST$   
(B) 7  
(D) 16  
area of the  
this rectangle in

- (A) 10 (B) 12 (C) 1 B  
(D) 24
9. Find the highest number that can divide 124, 184 and 248 without a remainder  
(A) 4 (B) 5 (C) 62 (D) 91
10. A man starts playing with x marbles, first he wins 2y marble and then he loses 3z marbles. If x = 10, Y = 3 and z = 5, how many marbles has he?  
(A) 17 (B) 1 (C) 8 (D) 24
11. Which of the following fractions is greater than  $\frac{1}{2}$  but less than  $\frac{7}{8}$   
(A)  $\frac{7}{8}$  (B)  $\frac{10}{11}$  (C)  $\frac{15}{24}$  (D)  $\frac{11}{3}$
12. Divide 217 oranges among Pius, Okon and Igwe so that Pius gets, twice as much as Okon, who gets twice as much as Igwe. How many oranges does Pius get?  
(A) 31 (B) 41 (C) 124 (D) 84
13. Find the average of  $\frac{4}{4}$ ,  $2\frac{3}{4}$ ,  $\frac{5}{6}$ ,  $1\frac{1}{6}$ , 1  
(A) 5 (B) 4 (C) 3 (D) 2
14. Find the median of 8.3, 11.3, 9.4, 13.8, 12.9, 10.5  
(A) 11.1 (B) 10.9 (C) 10.5 (D) 11.3
15. Simplify  $1\frac{1}{2} + 3\frac{1}{4} - \frac{1}{2} + \frac{4}{26}$   
(A)  $4\frac{3}{4}$  (B)  $1\frac{1}{2}$  (C)  $\frac{2}{3}$  (D)  $\frac{1}{3}$
16. If  $\frac{x}{3} = \frac{1}{6}$ , then  $\frac{x}{2}$  is equal to  
(A)  $\frac{1}{8}$  (B)  $\frac{1}{5}$  (C)  $\frac{1}{4}$  (D) 12
17. If a man earns N211, 200 a year and pays tax at the rate of 18k on each Naira. How much does he pay as tax in a month.  
(A) N1672.08 (B) N955.00 (C) N3168.00 (D) N13608.00
18. Which number should come next in this series 4, 57, 6, 54, 8, 51, 10  
(A) 25 (B) 42 (C) 48 (D) 8
19. The population of a village is 5,846. Express this number to 3 significant figures  
(A) 5850 (B) 5846 (C) 5840 (D) 585
20. Which of the following is the difference between temperature of 17°C above zero and 12°C below zero?  
(A) 5°C (B) 29°C (C) 17°C (D) 22°C

21. A man runs a race of 15 metres in 1 second. Calculate his speed in kilometers per hour  
 (A) 18km/h (B) 54km/h (C) 36km/h (D) 90km/h
22. Calculate the Principal which earns N750.75 simple interest in 11 years at 7% per annum.  
 (A) N456 (B) N618 (C) N825 (D) N978
23. When recording data, the tally marks IIII IIII IIII IIII IIII IIII represent the number  
 (A) 13 (B) 18 (C) 29 (D) 54
24. Find the mean of the following numbers: 7, 5, 0, 5, 0, 3, 0, 15, 0, 2, 2, 0, 1, 3, 5, 32, 1, 0, 0, 1, 2.  
 (A) 2 (B) 4 (C) 7 (D) 8
25. Find the sum of 76 tenths, 93 hundredths and 575 thousandths.  
 (A) 205 (B) 9.305 (C) 1.5 (D) 9.105
26. What is the capacity of a cube whose side is 50cm long?  
 (A) 125 000 litres (B) 1250litres (C) 125 litres (D) 2500 litres
27. The smaller of two consecutive numbers is doubled and added to the greater.  
 If the smaller number is  $n$ , then the total will be  
 (A)  $2n$  (B)  $2n + 1$  (C)  $3n$  (D)  $3n + 1$
28. In a school of 240 pupils, 25% were girls. If 10% of the boys and 20% of the girls attended a football match at the Liberty Stadium, Ibadan, what percentage of the school attended  
 (A) 20.7% (B) 15.3% (C) 12.5% (D) 10.5%
29. Find the value of  $x$  in the figure below  
 (A)  $180^\circ$  (B)  $90^\circ$  (C)  $45^\circ$  (D)  $22\frac{1}{2}^\circ$
- 
30. If 16 men take 14 days to dig a ditch, how long will it take 4 men to dig the same ditch if they work at the same rate?  
 (A) 4 (B) 8 (C) 56 (D) 64
31. A man travels due east 8km, then due south for 8km then due east again

for 7km. How far from his starting point is he now?

- (A)  $\sqrt{65}$ km (B) 17km (C)  $4\sqrt{20}$ km (D) 9km

32. When 147 is divided by 6, the remainder is M and when 147 is divided by 12, the remainder is K. What is the value of M - K

- (A) -1 (B) 0 (C) 3 (D) 6

33. If  $X^2 + 3 = 67$ , what is the value of X

- (A) 3 (B) 5 (C) 8 (D) 9

34. In the diagram below WXYZ is a square, what percentage of the square is shaded?



- (a)  $\frac{1}{3}\%$  (b)  $33\frac{1}{2}\%$  (c)  $37\frac{1}{2}\%$  (d) 45%

35. Find the mode of 6,5,3,6.3,2,4,6.4,5,6.4

- (A) 6 (B) 4 (C) 5 (D) 3

36. Write the next number in the following 4,9,25,49

- (A) 64 (B) 81 (C) 100 (D) 121

37. A man was 28 years of age when born. The her daughter was is now 60 sum of their ages the man years. How old is now?

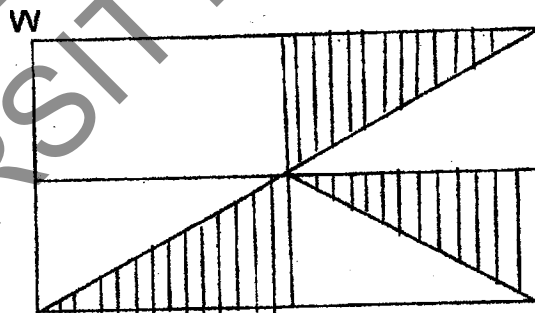
- (A) 40 years (B) 38years

- 44years (C) 30 years

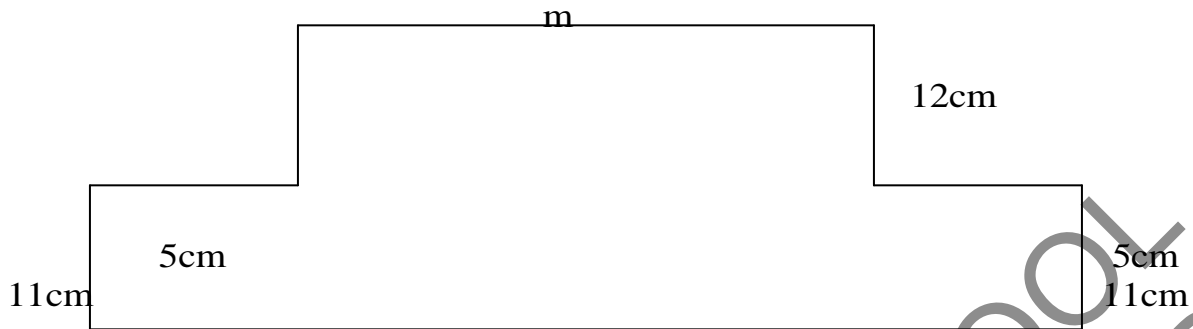
38. Simplify

- (A)  $Y - 3x$  (B)  $Y - 7x$  (C)  $7x + Y$  (D)  $3x + Y$

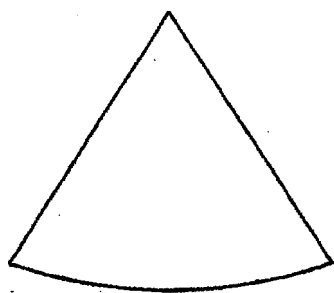
39. Find the perimeter of the figure below in metres



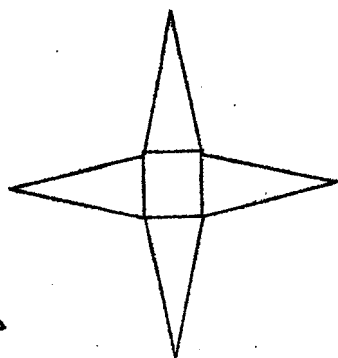
- (C)  $37\frac{1}{2}\%$



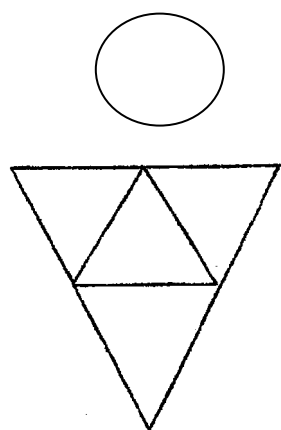
- (A) 0.76                      (B) 2.56                      (C) 0.98                      (D) 1.42
40. Three lines meet at a point. If the sum of two of the angles formed is  $163^\circ$ , the other angle is  
 (A)  $17^\circ$                       (B)  $197^\circ$                       (C)  $343^\circ$                       (D)  $73^\circ$
41. The number of degrees in  $2\frac{1}{2}$  of a revolution is  
 (A)  $540^\circ$                       (B)  $690^\circ$                       (C)  $810^\circ$                       (D)  $900^\circ$
42. A trader made a loss of 10% on a bicycle he sold for N5400. If he had sold it for N5760 what would have been his percentage loss  
 (A) 5%                      (B) 9%                      (C) 7%                      (D) 4%
43. A roll of cloth contains  $63\text{m}^2$  of material. The cloth is  $1\frac{1}{2}\text{m}$  wide. How long is the roll?  
 (A) 42m                      (B) 21m                      (C) 12m                      (D) 15m
44. Find the smallest number with which to multiply 126 in order to obtain a perfect square  
 (A) 4                      (B) 6                      (C) 10                      (D) 14
45. The square root of  $42\frac{1}{4}$  is  
 (A)  $3\frac{1}{4}$                       (B)  $6\frac{1}{4}$                       (C)  $6\frac{1}{4}$                       (D)  $7\frac{1}{2}$
46. The length of a rectangle is Ycm and its breadth is  $(y - 4)\text{cm}$ . If the perimeter of the rectangle is 48cm, find Y.  
 (A) 12                      (B) 14                      (C) 16                      (D) 18
47. How many 35cl of Coca-Cola drink can be obtained from a jug of, 5.25litres?  
 (A) 21                      (B) 17                      (C) 15                      (D) 13
48. Which net in the figures below is the net of a triangular prism?



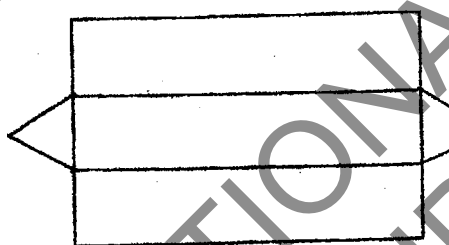
(A)



(B)



(C)



(D)

- 49 Express 12672 as a product of prime factor in Index form  
 (A)  $2^7 \times 3^2 \times 11$  (B)  $2^6 \times 3^3 \times 5^2$  (C)  $2^7 \times 3^3 \times 5^3$   
 (D)  $2^{10} \times 11^2$

- 50 A line cutting a pair of lines (whether parallel or not) is called a (an)  
 (A) gradient (B) transversal (C) edge (D)  
 vertex