

HILLRANGE SECONDARY SCHOOL
ENTRANCE EXAMINATION INTO JS 1 (MATHEMATICS)

INSTRUCTION: Encircle very neatly the letter that has the answer to the question

NAME: _____ Exam No. _____

1. Write in figures: One million, twenty three thousand and seventeen.
A. 1,023,017
B. 1,203,017
C. 1,230,170
D. 1,102,317
E. 12,230,170
2. What is CLXXII?
A. 116
B. 162
C. 159
D. 164
E. 172
3. If 3 tins of biscuits cost ₦225 what is the cost of 5 similar tins?
A. ₦375
B. ₦350
C. ₦300
D. ₦275
E. ₦135
4. From 238.05 take away 130.99
A. 108.16
5. What is 60% of 500kg
A. 125kg
B. 150kg
C. 200kg
D. 250kg
E. 300kg
6. What is 60% of 500kg
A. 125kg
B. 150kg
C. 200kg
D. 250kg
E. 300kg
7. If $U - 18 = 62$, find the value of U.
A. 44
B. 62
C. 54
D. 80
E. 45
8. Increase 400 by 25%
A. 100
B. 500
C. 1000
D. 6000
E. 5,500
9. Look at the following numbers: 11, 19, 3, 9, 2. Which of them is not a prime number?
A. 9

11. At a football match between ABC of Lagos and Rangers International of Enugu there were 1,550 spectators. Rewrite this sentence changing the figure to Roman figure

- A. MDL
- B. MCDL
- C. LXIV
- D. MDCL
- E. XXV

12. If 30% of the pupils in a school are boys, what percentage are girls?

- A. 170%
- B. 70%
- C. 60%
- D. 7%
- E. 1.7%

13. The cost price of a car is ₦450,000 naira and the selling price is ₦504,000 naira. What is the percentage gain?

- A. 6%
- B. 12%
- C. 14%
- D. 15%
- E. 10.5%

14. What is the average of 3, 5, 8 and 12?

- A. 6
- B. 6.5
- C. 7
- D. 8.5
- E. 24

15. Express $\frac{3}{4}$ as a decimal.

- A. 0.85
- B. 0.80
- C. 0.75
- D. 0.67
- E. 0.60

16. What is the volume of a rectangular water tank which is 6metres long, 4metres wide and 3metres high?

- A. 24 m^3
- B. 36 m^3
- C. 48 m^3
- D. 72 m^3
- E. 96 m^3

17. What is the smallest number divisible by 6, 9 and 12 without remainder?

- A. 18
- B. 24
- C. 36
- D. 54
- E. 72

18. Simplify $\frac{10.2 \times 2.4}{4.8}$

- A. 0.51
- B. 5.1
- C. 51.0
- D. 5.01
- E. 51.0

19. If $\frac{1}{4} S = 3$, what number is S represent?

- A. $\frac{1}{4}$
- B. 3
- C. 6
- D. 8
- E. 12

20. Which of the following is equal to 60?

- A. $2^2 \times 3 \times 5$
- B. $2^2 \times 3^2 \times 5$
- C. $3^2 \times 2 \times 5$
- D. $3^2 \times 2^2 \times 5$
- E. $5^2 \times 2 \times 5$

21. The area of a square room is 121 m^2 .

What is the perimeter of the room?

- A. 11 m
- B. 22 m
- C. 44 m
- D. 88 m
- E. 121 m

22. If a school begins at 8.15a.m. and closes at 1.35p.m. For how many hours and minutes are the pupils in school each day.

- A. 5 hours 5 minutes
- B. 5 hours 10 minutes
- C. 5 hours 15 minutes
- D. 5 hours 20 minutes
- E. 5 hours 50 minutes

23. Kola saves ₦300 out of her pocket money every week. How much will she save in 5 weeks?

- A. ₦500
- B. ₦800
- C. ₦1000
- D. ₦1200
- E. ₦1500

24. Simplify $\frac{1}{3} + \frac{1}{5} + \frac{1}{6}$

- A. $\frac{7}{30}$
- B. $\frac{2}{3}$
- C. $\frac{8}{15}$
- D. $\frac{1}{2}$
- E. $\frac{7}{10}$

25. Chike took a loan of ₦500 for 3 years. If he paid interest at the rate of 8% per annum, how much interest did he pay altogether?

- A. ₦150
- B. ₦140
- C. ₦120

D. ₦96

E. ₦24

26. If $2\frac{1}{4} + p = 7\frac{3}{4}$, what number does p represent?

- A. 10
- B. $9\frac{1}{2}$
- C. 9
- D. $5\frac{1}{2}$
- E. $5\frac{3}{4}$

27. Simplify $1\frac{1}{2} \times \frac{5}{6} \div 1\frac{1}{4}$

- A. $\frac{4}{9}$
- B. 1
- C. $1\frac{11}{25}$
- D. $1\frac{9}{16}$
- E. $2\frac{1}{4}$

28. Arrange $\frac{1}{2}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{3}$, in order of size starting from the smallest.

- A. $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{2}$,
- B. $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$
- C. $\frac{1}{8}$, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$
- D. $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{8}$, $\frac{1}{2}$
- E. $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{8}$

29. Express the ratio of 12 to 30 in its simplest form.

- A. 1 : 3
- B. 2 : 5
- C. 3 : 4
- D. 3 : 5
- E. 5 : 6

30. Akin has some money in a box. If $\frac{3}{8}$ of the money is ₦4.80, how much money does he have in the box?

- A. ₦1.60
- B. ₦1.80
- C. ₦12.80
- D. 14.40

E. N38.40

31. Express 0.85 as a percentage.

- A. 0.085%
- B. 0.85%
- C. 8.5%
- D. 85%
- E. 850%

32. On a map, a line of length 5cm represents 40km. How many kilometers would a line of length $7\frac{1}{2}$ cm represent?

- A. 24km
- B. 30km
- C. $37\frac{1}{2}$ km
- D. 60km
- E. 300km

33. Find the H.C.F of 26, 65 and 91

- A. 9
- B. 13
- C. 14
- D. 15
- E. 26

34. Find $\sqrt{\frac{16}{49}}$

- A. $\frac{4}{9}$
- B. $\frac{1}{2}$

36. What are the prime factors of 195?

- A. 3, 5
- B. 5, 7
- C. 3, 5, 7
- D. 3, 5, 11
- E. 3, 5, 13

37. Find the area of carpet which covers the floor of a room 12m long, 11m wide and 9m high.

- A. 550m^2
- B. 486m^2
- C. 176m^2
- D. 144m^2
- E. 132m^2

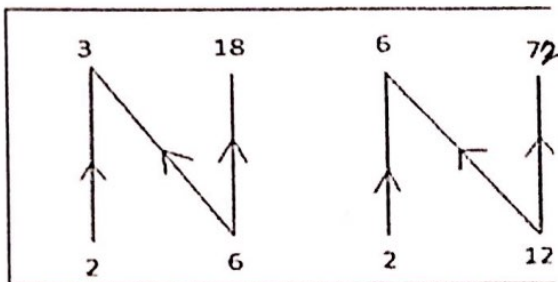
38. If a pupil had a score of 60%, how many marks out of 120 did he obtain?

- A. 45
- B. 50
- C. 60
- D. 66
- E. 72

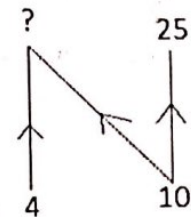
39. Butterflies in a garden were counted to be three scores, two dozens and five. How many butterflies were there altogether?

- A. 60
- B. 84

Use the above sample to answer questions 41 to 45

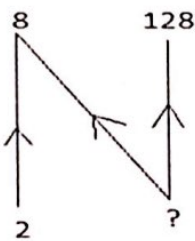


43.



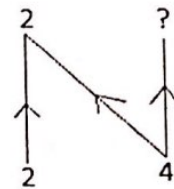
- A. $2\frac{1}{2}$
- B. 4
- C. 5
- D. 12
- E. 40

41.



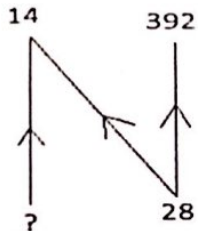
- A. 13
- B. 14
- C. 15
- D. 16
- E. 56

44.

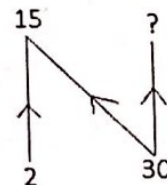


- A. 8
- B. 7
- C. 6
- D. 3
- E. 2

42.

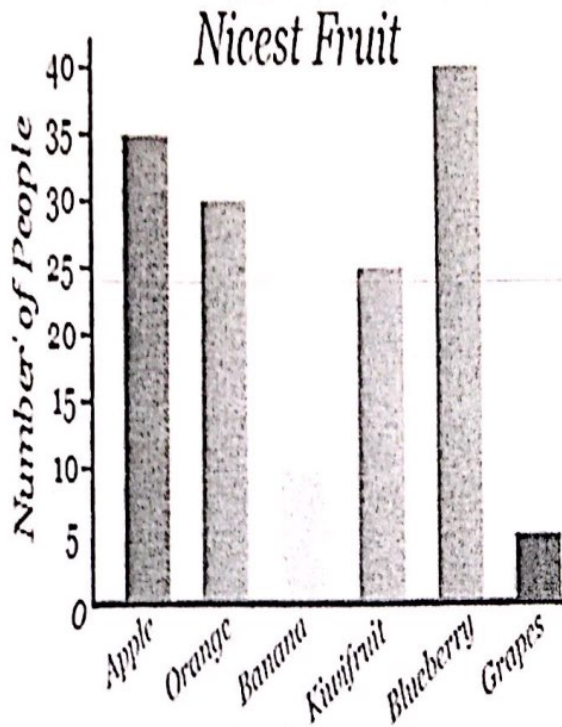


45.



- A. 44

Use the bar graph below to answer questions 46 – 50.



46. The most consumed fruit was?

- A. Apple
- B. Banana
- C. Blueberry
- D. Oranges
- E. Grapes

47. The least consumed fruit was?

- A. Apple
- B. Banana
- C. Blueberry
- D. Oranges
- E. Grapes

48. How many Kiwifruit was consumed?

- A. 15
- B. 20
- C. 25
- D. 30
- E. 40

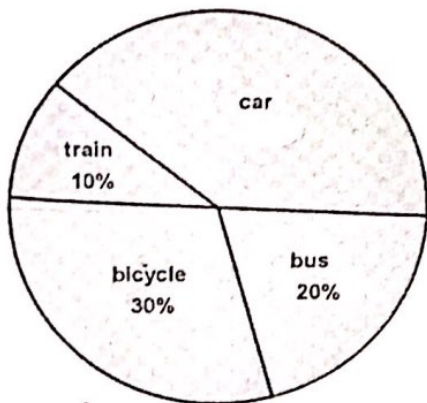
49. How many kinds of fruits were there altogether?

- A. 3
- B. 4
- C. 5
- D. 6
- E. 7

50. How many fruits were consumed altogether?

- A. 140
- B. 145
- C. 150
- D. 155
- E. 180

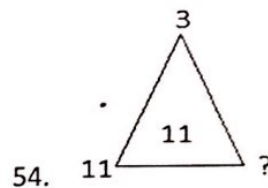
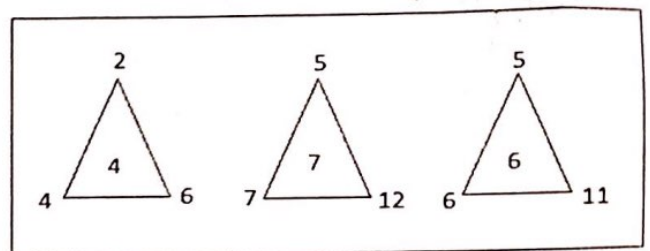
Use the pie chart for the means of transportation in a particular village to answer questions 51 – 53.



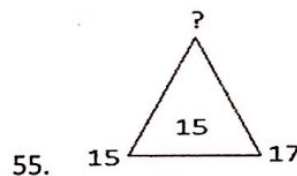
51. What percentage of the people travel by car?
- A. 40%
 - B. 50%
 - C. 30%
 - D. 55%
 - E. 25%

52. What angle represents those that travel by bicycle?
- A. 45°
 - B. 72°
 - C. 96°
 - D. 108°
 - E. 120°

Study the sample below and use it to answer questions 54 – 56.



- A. 6
- B. 9
- C. 11
- D. 14
- E. 22



- A. 2
- B. 3

- C. -5
- D. 2
- E. 5

$$\text{If } A*B = A^2 + B^2 - AB$$

$$2*3 = 4 + 9 - 6 = 7$$

Study the sample below and use it to answer questions 57 and 58.

$$\text{If } A.B = A + B + AB$$

$$5.8 = 5 + 8 + 40 = 53$$

Find the value of:

57. 3.8

- A. 11
- B. 24
- C. 35
- D. 42
- E. 57

58. 0.13

- A. 0
- B. 13
- C. 26
- D. 32
- E. 45

Find the value of:

59. 7*6

- A. 43
- B. 62
- C. 85
- D. 94
- E. 107

60. 11*12

- A. 265
- B. 216
- C. 184
- D. 155
- E. 133