



MATHS SAMPLE QUESTION PAPER - 1

GRADE





QUESTIONS 50



TOTAL MARKS 100



DURATION 60 mins



Instruction for Students:

- ⇒ Read the question carefully before answering.
- ⇒ Each question has 4 options (A, B, C & D).
- Grand Finale Marking System:-

Each correct answer carries 2 marks.

For each unattempted question, 2 marks will be deducted.

For each wrong answer, 2.5 marks will be deducted.

- ⇒ Grand Finale Result will be declared Online after 45 days from the exam date. To know your Result, login to www.neltas.com and use given Seat Number.
- 1. What is the reciprocal of $2\frac{1}{9} \times 1\frac{6}{57}$?

(A)
$$\frac{21}{3}$$

(B)
$$\frac{31}{2}$$

(C)
$$\frac{3}{7}$$

(D)
$$\frac{3}{5}$$

2. Represent the rational number $\frac{-145}{58}$ in its simplest form.

(A)
$$\frac{-5}{3}$$

(B)
$$\frac{-5}{6}$$

(C)
$$\frac{-5}{2}$$

(D) None of these

3. Find the average of 4.2, 3.04 and 8.3

4.
$$\sqrt{24,964} =$$

- 6. Find average of 112.2 and 50
 - (A) 80.1

(B) 8.11

(C) 81.1

(D) 82.1

7. $(-2^4)^2 \times 2^2 =$ _____

- (A) 1,024
- (B) -1,024
- (C) 1,204
- (D) -1,402
- 8. ₹5,000 is divided between 3 students A, B and C in the ratio of 5: 3: 2.

How much does C get?

(A) ₹1,500

(B) ₹1,250

(C) ₹1,100

(D) ₹1,000

- 9. HCF of 112 and 184 is _____
 - (A) 4

(B) 8

(C) 12

- (D) 16
- 10. Find the whole quantity, if 8% of it is 560
 - (A) 8,000

(B) 7,000

(C) 6,000

- (D) 1,000
- 11. A painting is bought for ₹5,000 and sold for ₹6,550. What is the profit percent?



- (B) 21%
- (C) 29%
- (D) 35%



12. 0.8 x ____ = 100.2

- (A) 122.25
- (B) 123.25
- (C) 124.25
- (D) 125.25
- 13. A man borrowed ₹8,000 from a bank at 8% per annum.

What is the amount he has to pay after 5 years?

- (A) ₹11,200
- (B) ₹10,200
- (C) ₹9,880
- (D) ₹11,400



- 14. Write the co-ordinates of the image of the point A (-5, 2) when reflected across the X axis.
 - (A) (5, -2)

(B) (2, 5)

(C) (-5, -2)

- (D) None of these
- 15. Which even number between 1 and 10 has a line of symmetry?
 - (A) 4

(B) 2

(C) 6

- (D) 8
- 16. Subtracting 3xyz from the sum of -5yzx and 6xyz gives _
 - (A) 2xyz

(B) -2xyz

(C) 8xyz

(D) 4xyz

(A)
$$a^2 + 2ab + b^2$$

(B)
$$a^2 + 3ab + b^2$$

(C)
$$a^2 + b^2$$

(D)
$$a^2 - 2ab + b^2$$

18. The sum of two numbers is 35. If one number exceeds the other by 7, what are the numbers?

(A) 7, 14

(B) 12, 19

(C) 14, 21

(D) 15, 20

- (A) 106
- (B) 96
- (C) 86
- (D) None of these

20. The difference in the measures of two complementary angles is 12 degrees. Find the angles.

(A) 40° , 50°

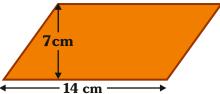
(B) 35°, 47°

(C) 28° , 40°

(D) 39°, 51°

21. The base and the corresponding height of a parallelogram are 14 cm and 7 cm respectively. Find the area of the parallelogram.

- (A) 108 cm²
- (B) 98 cm²
- (C) 96 cm²
- (D) None of these



22. The side of a square is 15 cm. Find its area.

- (A) 225 m²
- (B) 250 cm²
- (C) 225 cm²
- (D) 275 cm²

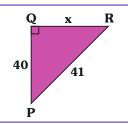


23. -198 x 65 x 0.44 x 0 = _____

- (A) -5,662.8
- (B) 5,662.8
- (C) -5,552.8
- (D) None of these

24. Find the unknown side x of the following right angled triangle:

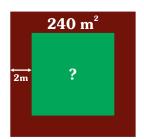
- (A) 18
- (B) 9
- (C) 19
- (D) None of these



25. A square lawn is surrounded by a path 2 m wide.

If the area of the path is 240 m², find the area of the lawn.

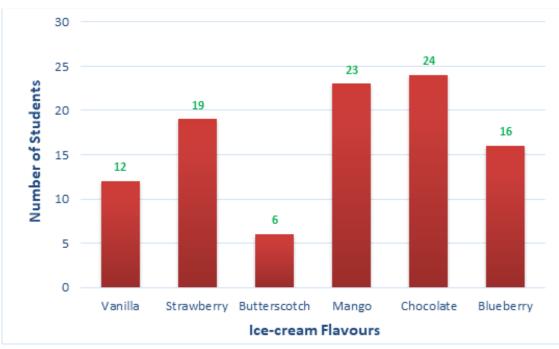
- (A) 784 m²
- (B) 748 m²
- (C) 684 m²
- (D) None of these



- 26. Complete the following pattern: 0.2, -0.6, 1.8, -5.4, _____
 - (A) -15.2
 - (B) 16.2
 - (C) 17.2
 - (D) None of these



A survey to find the favourite ice-cream flavour was conducted on a set of students in an event. Answer questions 27 to 30 based on the bar graph below:



- 27. How many students are involved in the survey?
 - (A) 75
 - (C) 100

- (B) 80
- (D) 120
- 28. Which is the most favourite ice-cream flavour?
 - (A) Mango
 - (B) Chocolate
 - (C) Strawberry
 - (D) None of these



- 29. Which two types of flavours are liked in the ratio of 1:4?
 - (A) Vanilla and chocolate

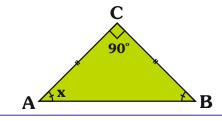
(B) Butterscotch and Blueberry

(C) Vanilla and Mango

- (D) Butterscotch and Chocolate
- 30. Which is the least favourite flavour in this survey?
 - (A) Butterscotch
 - (B) Vanilla
 - (C) Mango
 - (D) Blueberry



- 31. Find angle x in degrees in the given figure.
 - $(A) 30^{\circ}$
 - (B) 45°
 - (C) 60°
 - (D) 50°



32. In a basket of 87 fruits, $\frac{1}{3}$ are rotten. How many fruits are fresh?

- (A) 29
- (B) 39
- (C) 58
- (D) 68



33. Compare the rational numbers -4 and $\frac{3}{2}$ and say which of the following statements is correct.

- (A) -4 is greater than $\frac{3}{2}$
- (B) -4 comes to the right of $\frac{3}{2}$ in the number line
- (C) -4 comes to the left of $\frac{3}{2}$ in the number line
- (D) None of these

- (A) 20.03
- (B) 200.3
- (C) 20.3
- (D) None of these

- (A) -1,728
- (B) 1,728
- (C) -1,628
- (D) None of these

- (A) -120
- (B) 120
- (C) -240
- (D) 240

37. Find the average of the following: 2.3, 3.4, 4.05, 6.6, 7.77

- (A) 4.834
- (C) 4.824

- (B) 4.348
- (D) 4.884

- (A) 0
- (B) 1
- (C) -1
- (D) -11

39. 16:18 and 8:9 are in proportion. Say true or false.

(A) FALSE

(B) TRUE

(C) Cannot say

(D) None of these

40. Find the LCM of 15, 30, 105.

(A) 120

(B) 105

(C) 210

(D) 201

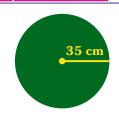
41. A shop has 85 pastries of which 17 has eggs. What percentage of the pastries are eggless?

- (A) 70%
- (B) 75%
- (C) 80%
- (D) 85%

- 42. Find the cost price if there is a loss of ₹5,300 on selling an article at ₹10,000
 - (A) ₹4,700
 - (B) ₹15,600
 - (C) ₹15,300
 - (D) None of these

Selling Price	₹10,000
Cost Price	?
LOSS	₹5,300

- 43. Find the circumference of a circle with radius of 35 cm.
 - (A) 210 cm
 - (B) 220 cm
 - (C) 190 cm
 - (D) 230 cm



- 44. If ₹100 becomes ₹200 in 5 years with simple interest, then the rate of interest is _____
 - (A) 30%

(B) 50%

(C) 20%

- (D) 40%
- 45. A 240m long train crosses a platform double its length in 54 seconds. What is the speed of the train?
 - (A) 15 m/s
 - (B) 13.5 m/s
 - (C) 13.33 m/s
 - (D) 15.33 m/s



- 46. A and B together can do a piece of work in 15 days, while B alone can finish it 20 days. In how many days can A alone finish the work?
 - (A) 30 days

(B) 15 days

(C) 60 days

(D) 75 days

- 47. Find the value of b + 110, if b = 11.
 - (A) 111

(B) 122

(C) 211

- (D) 121
- 48. (19ab 9a) (9a 19ab) = _____
- (A) 0a + 0ab
- (B) 38ab + 18a
- (C) 18a
- (D) 38ab 18a

49. Solve for x: 2x - 4 = 6

- (A) x = 6
- (B) x = 5
- (C) x = -6
- (D) x = -5
- 50. Five years from now Sam will be $1\frac{1}{2}$ times his present age. How old is he now?
 - (A) 20

(B) 10

(C) 5

(D) 15

NELTAS M-CAT GRADE 7

ANSWERS										
_					_	_	_			
1	2	3	4	5	6	7	8	9	10	
С	С	D	С	В	С	Α	D	В	В	
11	12	13	14	15	16	17	18	19	20	
Α	D	Α	С	D	В	D	С	В	D	
21	22	23	24	25	26	27	28	29	30	
В	С	D	В	Α	В	С	В	D	Α	
31	32	33	34	35	36	37	38	39	40	
В	С	С	В	Α	С	С	С	В	С	
41	42	43	44	45	46	47	48	49	50	
С	С	В	С	С	С	D	D	В	В	