

1. The value of $(-1)^{27} \times (-1)^{53} \times (-1)^4$ is _____ .

- A. -1
- B. 1
- C. -1 or 1
- D. 2

Right Answer:: B

2. The value of $(-5) + (-4) - (-4) - (-5) + (-5) + (-4) - (-5) + (-4)$ is _____ .

- A. - 4
- B. - 5
- C. 0
- D. - 8

Right Answer:: D

3. A gardener plans to plant 630 trees in 21 rows each containing the same number of trees, then how many trees will there be in each row.

- A. 300
- B. 30
- C. 21
- D. 3

Right Answer:: B

4. The value of $(-5) \times (-4) \times (-3) \times (-2) \times (-1) \times 0 + 0 \times (1) \times (2) \times (3) \times (4) \times (5)$ is _____.

- A. 120
- B. -120
- C. 240
- D. 0

Right Answer:: D

5. Which of the following statements is true?

- A. 1 and -1 are reciprocal of themselves
- B. Zero has no reciprocal
- C. The product of two rational numbers is a rational number
- D. All of the above

Right Answer:: D

The average of the middle two rational numbers if $\frac{4}{7}, \frac{1}{3}, \frac{2}{3}, \frac{5}{9}$ are

6. arranged in ascending order is _____.

- A. $\frac{4}{9}$
- 71

- B. $\frac{63}{4}$
 C. $\frac{18}{71}$
 D. 126

Right Answer:: D

7. Which of the following statements are correct?

(1) Every integer is a rational number and every fraction is a rational number.

(2) A rational number $\frac{p}{q}$ is positive if p and q are either both positive or both negative.

(3) A rational number $\frac{p}{q}$ is negative if one of p and q is positive and other is negative.

(4) If there are two rational numbers with common denominator then the one with the larger numerator is larger than the other.

- A. Statements 1 and 4 are incorrect
 B. Statements 2 and 3 are incorrect
 C. Statement 1 is incorrect
 D. All the statements are correct

Right Answer:: D

8. The quotient when 0.00639 is divided by 0.213 is _____.

- A. 0.3
 B. 0.03
 C. 0.003
 D. 3

Right Answer:: B

9. The solution of $0.5x - (0.8 - 0.2x) = 0.2 - 0.3x$ is _____.

- A. $x = 1$
 B. $x = -1$
 C. $x = 2$
 D. Both (A) and (B)

Right Answer:: A

10. The ages of A and B are in the ratio 5: 3. After 6 years, their ages will be in the ratio 7: 5. The sum of their present ages is _____.

- A. 9 years
 B. 10 years
 C. 15 years
 D. 24 years

Right Answer:: D

The total cost of three prizes is Rs.2550. If the value of second prize is $\frac{3}{4}$ th

of the first and the value of 3rd prize is $\frac{1}{2}$ of the second prize, then the value

11. of first prize is _____.

- A. Rs. 900
- B. Rs.1500
- C. Rs.1200
- D. Rs.450

Right Answer:: C

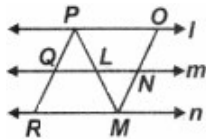
12. There were only two candidates who participated in an election. One contestant got 62% votes and was elected by a margin of 144 votes. The total numbers of votes were _____.

- A. 500
- B. 600
- C. 700
- D. 800

Right Answer:: B

Given that $l \parallel m \parallel n$, $\Delta PQL \cong \Delta MNL$, $PQ = MN$, $PL = LM$, $QL =$

13. NL , $MN = NO = 2.2$ cm, $PL = 3.2$ cm. Then the length of PQ is _____



- A. 3.2 cm
- B. 4 cm
- C. 7.2 cm
- D. 2.2 cm

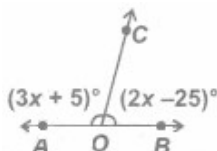
Right Answer:: D

14. The angle between two hands of a clock at 4 : 30 pm is _____

- A. 45°
- B. 90°
- C. 180°
- D. 60°

Right Answer:: A

15. In the adjoining figure, the value of $\angle AOC$ if AOB is a straight line is _____



- A. 40°
- B. 55°
- C. 125°
- D. 180°

Right Answer:: C

16. A right-angled triangle has hypotenuse 13 cm, one side is 12 cm, then the third side is _____.

- A. 5 cm
- B. 6 cm
- C. 7 cm
- D. 4 cm

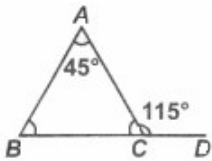
Right Answer:: A

17. Two chimneys 18 m and 13 m high stand upright on a ground. If their feet is 12 m apart, then the distance between their tops is _____.

- A. 5 m
- B. 31 m
- C. 13 m
- D. 18 m

Right Answer:: C

18. Side BC of a triangle ABC has been produced to point D. If $\angle ACD = 115^\circ$ and $\angle A = 45^\circ$, then $\angle C$ is _____.



- A. 65°
- B. 80°
- C. 100°
- D. 60°

Right Answer:: A

19. The sides of a $\triangle ABC$ measure 6 cm, 8 cm and 10 cm. The area of the triangle is _____.

- A. 40 cm^2
- B. 24 cm^2
- C. 30 cm^2
- D. None of these

Right Answer:: B

20. A triangle whose lengths of sides are 5cm, 12cm and 13cm. The triangle is_____.

- A. Obtuse-angled triangle
- B. Acute-angled triangle
- C. Right-angled triangle
- D. Triangle is not formed

Right Answer:: C

21. A contractor employed 210 men to build a house in 60 days. After 12 days, he was joined by 70 more men. In how many days will the remaining work be finished ?

- A. 35 days
- B. 36 days
- C. 38 days
- D. 40 days

Right Answer:: B

22. P can do a piece of work in 9 days. Q is 50% more efficient than P. The number of days it takes Q to do the same piece of work is _____.

- A. $13\frac{1}{2}$
- B. $4\frac{1}{2}$
- C. 6
- D. 3

Right Answer:: C

23. In an examination one should get 36% of the maximum marks to pass. A student obtains 113 marks and is declared fail by 85 marks. The maximum marks are _____.

- A. 500
- B. 550
- C. 640
- D. 1008

Right Answer:: B

24. Salary of an officer increases every year by 20%. His salary in the year 2001 was Rs.26640. What was his salary in 1999?

- A. Rs.20, 000
- B. Rs.19, 028
- C. Rs.18, 500
- D. Rs.19,528

Right Answer:: C

25. Subtract the sum of $(8a - 6a^2 + 9)$ and $(-10a - 8 + 8a^2)$ from -3 is _____.

- A. $2a^2 - 2a - 2$
- B. $2a^2 - 2a + 4$
- C. $-2a^2 + 2a - 4$
- D. $-2a^2 + 2a - 2$

Right Answer:: C

26. What is the value of $ax^2 + bx + c$ at $x = \frac{-b}{a}$?

- A. a
- B. $b^2 - 4ac$
- C. c
- D. 0

Right Answer:: C

27. The given algebraic expression of its exponent in ascending order is
 $x - x^8 + x^2 - 1.7x^{10} + 1.4x^8 - 7.8x^2 + 4 - 9x$

- A. $4 - 8x - 6.8x^2 + 0.4x^8 - 1.7x^{10}$
- B. $-1.7x^{10} + 0.4x^8 - 6.8x^2 - 8x + 4$
- C. $4 - 6.8x - 8x^2 + 0.4x^8 - 1.7x^{10}$
- D. $-1.7x^{10} - 0.4x^8 - 6.8x^2 + 8x + 4$

Right Answer:: A

28. If $x = 5$ and $y = x + 7$ then, value of $\sqrt{x^2 + y^2} =$

- A. 65
- B. 26
- C. 17
- D. 13

Right Answer:: D

29. If $\left(\frac{5}{3}\right)^{-5} \times \left(\frac{5}{3}\right)^{11} = \left(\frac{5}{3}\right)^{8+x}$, then $x = ?$

- A. $\frac{-1}{2}$
- B. -2
- C. 2
- D. $\frac{1}{2}$

Right Answer:: B

30. The value of x so that $\left(\frac{3}{5}\right)^3 \times \left(\frac{3}{5}\right)^{-6} = \left(\frac{5}{3}\right)^{1-2x}$ is _____.

- A. 0
- B. 1
- C. -1
- D. 32

Right Answer:: C

31. Which of the following numbers is in the scientific notation?

- A. 1.26×10^{-5} m
- B. 15.75×10^3 km
- C. 0.18×10^{-7} km
- D. 0.0013×10^{-8} km

Right Answer:: A

32. If $3^x = 500$, then the value of 3^{x-2} is _____.

- A. $\frac{100}{9}$
- B. $\frac{1000}{9}$
- C. $\frac{500}{9}$
- D. $\frac{500}{3}$

Right Answer:: C

33. A farmer wishes to start a 100 square metres rectangular vegetable garden. Since he has only 30 metres barbed wire, he fences three sides of the rectangular garden. The 4th side of the garden is surrounded by the compound wall of his house. The dimensions of the garden is _____.

- A. 25 m $\times$ 4 m
- B. 25 m $\times$ 5 m
- C. 20 m $\times$ 5 m
- D. 20 m $\times$ 4 m

Right Answer:: C

34. How many square centimetres of construction paper does Reema need in order to exactly cover, with no overlap, 5 sides of a cube with edges that are 12 centimeters long?

- A. 60 cm²
- B. 144 cm²
- C. 300 cm²
- D. 720 cm²

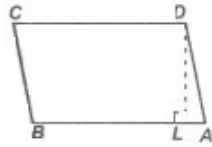
Right Answer:: D

35. A horse is tied to one corner of a rectangular field, 60 m by 40 m, by a rope 14 m long. On how much area can the horse graze?

- A. 150 m²
- B. 154 m²
- C. 160 m²
- D. 165 m²

Right Answer:: B

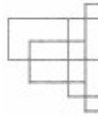
36. In the given figure, ABCD is a parallelogram. $DL \perp AB$ and $AB = 13 \text{ cm} = AD$. If the area of parallelogram is 156 cm^2 . Then AL is _____.



- A. 5 cm
- B. 6 cm
- C. 7 cm
- D. 8 cm

Right Answer:: A

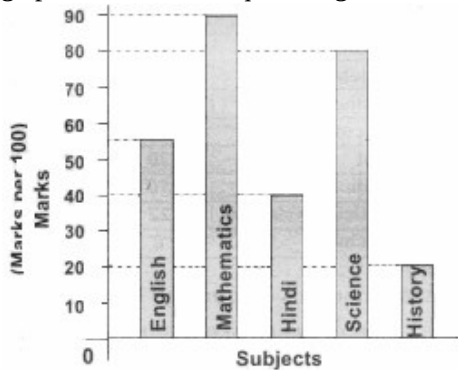
37. How many four sided figures are there in the given diagram?



- A. Less than 15
- B. Less than 10
- C. Less than 16
- D. More than 20

Right Answer:: D

38. Read the following graph and answer the question given below:



At what subject is the student sharp?

- A. English
- B. Science
- C. Mathematics
- D. History

Right Answer:: B

39. After rotating by 60° about a centre, a figure looks exactly the same as at its original position. At what other angle will this happen for the figure?

- A. 120°
- B. 100°
- C. 150°

D. 90°

Right Answer:: A

40. Which letter of the English alphabet has reflectional symmetry about both horizontal and vertical mirrors?

A. A

B. C

C. U

D. H

Right Answer:: D

41. In the sequence of numbers 5, 8, 13, X, 34, 55, 89; the value of X is _____.

A. 29

B. 23

C. 21

D. 20

Right Answer:: C

42. Find the odd number out?

A. 5

B. 115

C. 205

D. 14

Right Answer:: D

43. Two letters of the word 'TROUBLE' have as many letters between them in the word as in the English alphabet. Which one of those two comes earlier in the alphabet?

A. O

B. R

C. L

D. U

Right Answer:: C

44. The number opposite to 3 is



A. 2

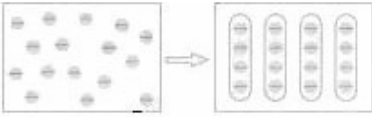
B. 3

C. 4

D. 6

Right Answer:: C

45. Choose the expression represented by the model.



- A. $16 \div (-4)$
- B. $16 \div 4$
- C. $-16 \div 4$
- D. None of these

Right Answer:: B

Monika answered $\frac{3}{4}$ of the questions on her quiz correctly.

46. What percent of the questions did she answer correctly?

- A. 25%
- B. 34%
- C. 50%
- D. 75%

Right Answer:: D

47. A class has 21 students. The ratio of girls to boys is 4: 3. How many girls are there in the class?

- A. 8
- B. 9
- C. 7
- D. 12

Right Answer:: D

48. Ram and his mom are baking cupcakes. The recipe calls for one egg for every dozen cupcakes. Ram finds five eggs in his refrigerator and makes a chart to see how many cupcakes he can make.



Eggs	1	2	3	4	5
Cupcakes	12	24	36	48	-

What is the missing value in the chart?

- A. 17
- B. 49
- C. 60
- D. 72

Right Answer:: C

49. A mistake was made in simplifying the expression given below.

Simplify : $5 + 2(6 + 4) - 2^3$,

Step 1: $5 + 2(10) - 2^3$

Step 2: $7(10) - 2^3$

Step 3: $70 - 2^3$

Step 4: $70 - 8$

Step 5: 62.

In which step did the first mistake appear ?

- A. Step 1
- B. Step 2
- C. Step 3
- D. Step 4

Right Answer:: B

50. Find the odd one out.

- A. 83 - 75
- B. 58 - 50
- C. 49 - 42
- D. 25 - 17

Right Answer:: C