

Brihan Mumbai Ganit Adhyapak Mandal, Mumbai

Date : 31-7-2022

Time : 11 a.m. to 1 p.m.

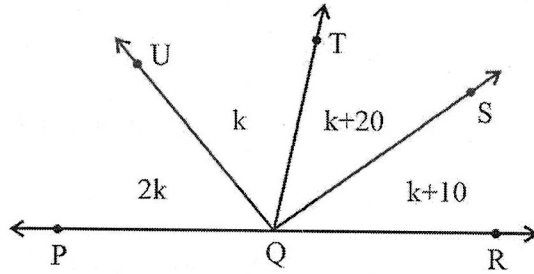
Std. : VIII

Maths Concept Exam 2022

Max. Marks : 100

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- 1) Which of the following numbers is divisible by 15?
A) 209870 B) 753465 C) 354685 D) 276530
- 2) If $2 - \frac{x}{3} = 4$, find the value of x .
A) -6 B) 6 C) -2 D) 18
- 3) Find L.C.M. of 22, 33, 44.
A) 33 B) 132 C) 88 D) 11
- 4) The square root of 53361 is _____.
A) 231 B) 211 C) 261 D) 249
- 5) 16 % of the pages of the book were read on Monday, 32 % of the pages of the book were read on Tuesday. On Wednesday 325 pages of the book remained to be read. How many pages were read within Monday and Tuesday together?
A) 300 B) 400 C) 275 D) 280
- 6) $a + b = 6$ and $2ab = 17.5$ find the value of $2a^2 + 2b^2$.
A) 37 B) 2 C) 4 D) 34
- 7) Which is not a triangular number from the following list
3, 6, 10, 15, 18, 21, 28, 36
A) 10 B) 18 C) 28 D) 36
- 8) $\frac{8^{\frac{1}{3}} \times 8^{-\frac{3}{5}} \times 8^{\frac{2}{3}}}{8^1 \times 8^{\frac{2}{5}}} =$ _____.
A) $\frac{1}{8}$ B) $8^{-\frac{8}{5}}$ C) $8^{\frac{8}{5}}$ D) 8^{-2}
- 9) If $47 \times 38 = 1786$, then find the value of 4.7×0.038 .
A) 1.786 B) 17.86 C) 0.1786 D) 0.001786
- 10) The number of 50-Rs. notes and 200-Rs. notes is the same. 100-Rs. notes are double the 50-Rs. notes. If the total amount is Rs. 2250, find the total number of notes.
A) 16 B) 12 C) 20 D) 24

24)



Which of the following angles, has measure equal to 80° ?

- A) $\angle PQU$ B) $\angle TQS$
 C) $\angle TQR$ D) $\angle UQS$

25) How much iron sheet is required to make an iron box of length 40 cm., breadth 30 cm. and height 20 cm. ?

- A) 24000 cu.cm. B) 2600 sq. cm. C) 5200 sq. cm. D) 5200 cu.cm.

26) Soham and Abdul invested some amount in the business in proportion 7 : 6 . If total profit is Rs. 13000, what is Soham's share in profit?

- A) Rs. 1000 B) Rs. 6000 C) Rs.1300 D) Rs. 7000

27) From the cloth of length 8 m. and breadth 3 m., how many handkerchiefs of length 75 cm. and breadth 50 cm. can be prepared?

- A) 64 B) 128 C) 192 D) 32

28) For ploughing $\frac{3}{8}$ th part of a farm 1hr.30 min. are required. How much time will be required for ploughing 0.5 part of that farm?

- A) 1 hr. 15 min. B) 2 hrs. 15 min. C) 2 hrs. D) 3hrs.

29) If the edge of a cube is 8 cm, find its total surface area.

- A) 64 sq. cm. B) 128 sq. cm. C) 512 sq. cm. D) 384 sq. cm.

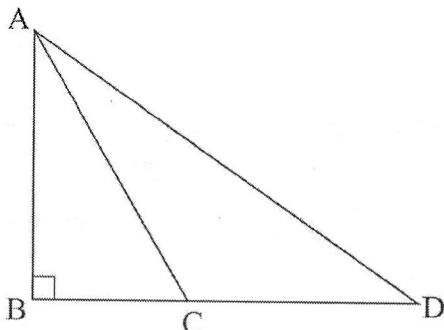
30) Which of the following is a Pythagorean triplet?

- A) (11, 12, 15) B) (1.5, 1.6, 1.7) C) (8, 15, 17) D) (40, 20, 30)

31) Which fraction will be on the third position, if $\frac{-1}{2}, \frac{-4}{7}, \frac{-3}{5}, \frac{-2}{3}$ are arranged in the descending order?

- A) $\frac{-1}{2}$ B) $\frac{-4}{7}$ C) $\frac{-3}{5}$ D) $\frac{-2}{3}$

32)

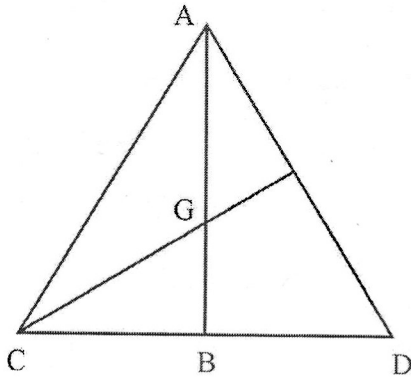


In the adjoining figure, $\ell(AB) = 4$ cm ,
 $\ell(AC) = 5$ cm , $\ell(CD) = 10$ cm
 Find $A(\Delta ACD)$

- A) 50 sq. cm B) 25 sq. cm
 C) 40 sq. cm D) 20 sq. cm

- 33) In 5.278, the place value of 7 is _____.
- A) 7×10^{-1} B) 7×10^1 C) 0.7×10^1 D) 7×10^{-2}
- 34) Write the number in decimal form $\frac{40}{11}$.
- A) $3.6\bar{3}$ B) 3.63 C) $3.\overline{63}$ D) $0.\overline{363}$
- 35) Find the average of the numbers : 9, 11, 8, 20, 10, 16, 10, 0
- A) 10.5 B) 1.05 C) 12 D) 21
- 36) Find the simple interest on a principle of Rs. 1250 at the rate of 9 p.c.p.a. for 2 years.
- A) Rs. 225 B) Rs. 252 C) Rs. 112.5 D) Rs. 216.9
- 37) Find the perimeter of a square whose side is 1m 20cm.
- A) 4.08 cm B) 4.12 cm C) 4.8 m D) 4.2 m

38)

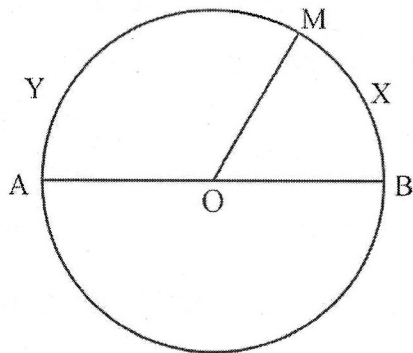


In $\triangle ACD$, G is the centroid, $GB = 5$ cm, what is $\ell(AB)$?

- A) 15 cm B) 10 cm
C) 2.5 cm D) 10.5 cm
- 39) Subtract $9\frac{1}{3}$ from $10\frac{2}{4}$
- A) $\frac{11}{6}$ B) $1\frac{1}{2}$ C) $1\frac{1}{3}$ D) $\frac{7}{6}$
- 40) If exterior angle of a regular polygon is 45° , how many sides are there?
- A) 9 B) 8 C) 6 D) 7
- 41) If a complementary angle of a given angle is 10° , what is supplementary angle of given angle?
- A) 100° B) 90° C) 80° D) 180°
- 42) Radius of a circular plot is 7 meters. How much wire is required to fence the plot with 3 rounds of wire?
- A) 66 m. B) 21 m. C) 132 m. D) 44 m.

- 43) 5 men can paint a wall in 18 hrs. How many men will paint that wall in 10 hrs.?
 A) 9 men B) 2 men C) 6 men D) 8 men
- 44) A tin contains 25 litres of petrol. Due to leakage 3 litres of petrol are lost. What percent of petrol remained in the tin?
 A) 80% B) 88% C) 12% D) 22%
- 45) For a prism $V = 6$ and $F = 5$. How many edges does it have?
 A) 9 B) 10 C) 5 D) 12
- 46) Sumati bought 80 cookers at Rs.700 each. Transport cost was Rs. 1280. If she wants a profit of Rs. 18000, what should be the selling price per cooker?
 A) Rs. 738.50 B) Rs. 491 C) Rs. 941 D) Rs. 1075
- 47) Which of the following is not a pair of twin primes?
 A) 101 and 103 B) 107 and 109 C) 71 and 73 D) 141 and 143
- 48) Which of the following statements is true?
 A) The sum as well as the product of two even numbers is always even.
 B) The difference between the two odd numbers is always odd.
 C) The product of three positive numbers is always negative.
 D) The product of three negative numbers is always positive.
- 49) If a rope of length 1.440 km. is cut 8 times at equal distance, what will be the length of each piece?
 A) 120 m. B) 140 m. C) 160 m. D) 180 m.

50)



In a circle with centre O, AB is a diameter.
 $m(\text{arc AYM}) = x + 10$,
 $m(\text{arc MXB}) = x - 40$. Find $m\angle BOM$.

- A) 105° B) 65°
 C) 30° D) 50°