

Brihan Mumbai Ganit Adhyapak Mandal, Mumbai

July 2020

Time : 2 Hrs.

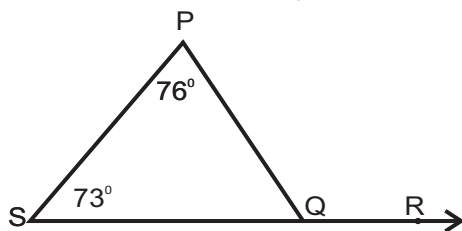
Std. : VIII

Maths Concept Practice Exam 2020

Max. Marks : 100

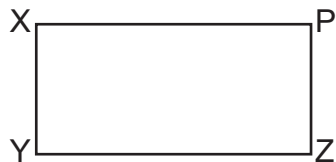
- Instructions :
- 1) Do the rough work in your note book or on a paper.
 - 2) Write the answers of questions in your note book or on a full scape paper.
 - 3) on 6th August 2020, the answers will be displayed on the website at 3.00 p.m.
-

1. If $7a^2 + 946$ is divisible by 45 and remainder is 1 .what is a ?
A) 9 B) 1 C) 2 D) 0
2. LCM and HCF of two numbers are 1575 and 3 respectively . If one of the numbers is 75 , find the other number.
A) 63 B) 25 C) 21 D) 70
3. Add 1st expressions to the 2nd expressions.
 $8a^2 - 3b^2 - 14ab$; $12b^2 + 8ab - 7a^2$
A) $20a^2 + 11b^2 + 6ab$ B) $a^2 + 9b^2 - 6ab$
C) $15a^2 - 9b^2 + 6ab$ D) $-a^2 - 9b^2 - 22ab$
4. Find the ratio of 15 litre to 350 millilitre .
A) 3 : 70 B) 300 : 7 C) 30 : 7 D) 3000 : 7
5. In a quadrilateral ABCD , $m\angle D = 150^\circ$, $\angle A = \angle B = \angle C$, What is the measure of $\angle B$?
A) 70° B) 150° C) 30° D) 180°
6. If selling price of 9 toys is equal to cost price of 10 toys .
Find the profit percent in the transaction .
A) 9% B) 10% C) $\frac{100}{6}$ % D) $\frac{100}{9}$ %
7. Find the measure of $\angle PQR$



- A) 49° B) 149° C) 61° D) 73°
8. If $4(x - 2) = x + 7$ then $x = ?$
A) 5 B) 3 C) 1 D) $\frac{5}{4}$

9. Find the prime factors of 3003 .
 A) (3,9,11,17) B) (5 , 7, 11, 13) C) (3,7,11,13) D) (3,7 ,13 17)
10. A cable of length $257\frac{1}{4}$ m. has to be cut in to 21 pieces of equal length. Find the length of each piece.
 A) $11\frac{1}{4}$ m. B) $\frac{41}{4}$ m. C) $\frac{49}{4}$ m. D) $\frac{21}{4}$ m.
11. Radius of a circle is 10 cm . What is the length of the largest chord of the circle .
 A) 5 cm B) 10 cm C) 20cm D) 8cm
12. $1.1 \times 0.1 \times 0.11 = \text{-----}$
 A) 121 B) 0.121 C) 1.21 D) 0.0121
13. The total surface area of a cuboid of length 10 cm, breadth 5.2 cm and height 2.8 cm is ----
 A) 18 sq. cm. B) 36 sq. cm . C) 189.12 sq. cm. D) 94.56 sq. cm .
14. If the simple interest of Rs. 70000 for 2 years is Rs. 9100.
 What was the rate of interest ?
 A) 13% B) 6.5 % C) 7 % D) 7.5 %
15. The recurring decimal form of $\frac{5}{6}$ is _____
 A) $0.8\bar{3}$ B) 0.832 C) 0.83 D) $0.\bar{83}$
16. Expand : $(-4m + 7n)^2 = ?$
 A) $4m^2 - 28mn + 49n^2$ B) $16m^2 - 56mn + 49n^2$
 C) $16m^2 - 28mn + 49n^2$ D) $4m^2 + 56mn - 49n^2$
17. □XYZP is a rectangle. XP = 60 cm. PZ = 11 cm Find length of seg. PY .



- A) 71 cm B) 142 cm C) 61 cm D) 660cm

18. $-\frac{4}{9} + -\frac{5}{12} + \frac{13}{18} = ?$

- A) $\frac{4}{39}$ B) $-\frac{5}{36}$ C) $\frac{22}{39}$ D) $\frac{1}{18}$

19. Factorise : $8m^2 - 128n^2$
 A) $(4m + 8n)(4m - 8n)$ B) $2(2m - 8n)(2m + 8n)$
 C) $2(4m - 8n)(4m + 8n)$ D) $(2m - 4n)(2m + 4n)$
20. 6 workers can complete the work in 15 days . How many more workers are required to complete the same work in 9 days ?
 A) 10 B) 15 C) 21 D) 4
21. If a saree is sold for Rs.800 ,and a profit of Rs.125 is made, What is the cost price of the saree ?
 A) 925 Rs B) 675 Rs C) 125 Rs D) 900 Rs.
22. An angle which is greater than 180° and less than 360° is called as -----
 A) Obtuse angle B) Straight angle C) Complete angle D) Reflex angle
23. Area of a rectangle is 114 sq. cm. Its breadth is 6 cm . Find the perimeter of the rectangle
 A)150 cm . B)25 cm . C)50 cm . D) 19 cm.
24. Simplify : $\frac{1}{8} + \frac{3}{4} \div \frac{15}{8}$
 A) $\frac{7}{15}$ B) $\frac{8}{45}$ C) $\frac{21}{40}$ D) $\frac{19}{8}$
25. Subtract 2nd expression from the 1st .
 $5mn - 3m^2 + 4n^2$; $2m^2 - 7n^2 + 9mn$
 A) $11n^2 + 5m^2 - 4mn$ B) $-10n^2 - 6m^2 - 4mn$
 C) $11n^2 - 5m^2 - 4mn$ D) $11n^2 - 5m^2 + 14mn$
26. Which of the options given below is the square of the binomial $(\frac{1}{x} - 12)$.
 A) $x^2 - 144$ B) $\frac{1}{x^2} - 144$ C) $\frac{1}{x^2} - \frac{24}{x} + 144$ D) $\frac{1}{x^2} - \frac{12}{x} + 144$
27. In a hospital out of 4080 corona patients 3570 recovered. What is the percentage of the patient who recovered?
 A) 25 % B) 75 % C) 87.5 % D) 87 %
28. What is to be subtracted from 5.1 to get 0.51.
 A) 4.50 B) 4.59 C) 10.2 D) 5.5
29. The average of 10 , x , 26 , 22.5 , 0 , 1.5 is 10 . then x = ?
 A) 10 B) 6 C) 0 D) 1

30. Factorise : $81x^2 - 289y^2$
 A) $(9x + 19y)(9x - 19y)$ B) $(9x + 17y)(9x - 17y)$
 C) $(9y + 17x)(9y - 17x)$ D) $(9x + 13y)(9x - 13y)$
31. Simplify : $\frac{(-2)^5 \times (-3)^4}{4^2 \times 9} = ?$
 A) 18 B) -18 C) -36 D) 36
32. If $\sqrt{0.01530169} = 0.1237$ then $\sqrt{1.530169} = ?$
 A) 0.01237 B) 1.1237 C) 1.123 D) 1.237
33. The cost of 1 dozen notebooks is Rs .300 . What is the cost of 5 notebooks ?
 A)Rs.60 B) Rs.12 C) Rs. 125 D) Rs.25
34. $(\frac{1}{2}x - \frac{2}{3}y)^2 = ?$
 A) $(\frac{1}{4}x^2 - \frac{2}{3}xy + \frac{4}{9}y^2)$ B) $(\frac{1}{2}x^2 - \frac{4}{3}xy + \frac{4}{9}y^2)$
 C) $(\frac{1}{4}x^2 - \frac{4}{3}xy + \frac{1}{9}y^2)$ D) $(\frac{1}{4}x^2 - \frac{2}{3}xy + \frac{4}{3}y^2)$
35. If the product of two numbers is 3250 and their L.C.M. is 650 . Find their H.C.F.
 A) 10 B) 13 C) 5 D) 50
36. In a circle with centre O measure of minor arc is 105° . What is the measure of its corresponding major arc ?
 A) 15° B) 75° C) 255° D) 285°
37. Out of 10 lit of milk 7 lit & 250 ml was sold . How much milk remained in the can ?
 A)1 lit 750 ml B)2 lit 750 ml C)3 lit 750 ml D) 3 lit 50 ml
38. Multiply : $(4q - 7p)(-3p + 9q)$
 A) $12p^2 + 75pq + 63q^2$ B) $-21p^2 - 75pq + 36q^2$
 C) $-21p^2 + 75pq - 36q^2$ D) $21p^2 - 75pq + 36q^2$
39. What is the measure of a supplementary angle of a complementary angle of 59° ?
 A) 149° B) 31° C) 40° D) 90°
40. Make the greatest four digit number using the digits 7, 5, 8 and repeating any one of the above three digits twice
 A) 8557 B) 8575 C) 8857 D) 8875
41. $(2 \times m)^4 = 256$ then $m = ?$
 A) 16 B) 8 C) 2 D) 4

42. A and B shared the profit of Rs. 30000 in the ratio 8 : 7 .
How much amount did B receive ?
A) Rs.16000 B) Rs. 8000 C) Rs. 7000 D) Rs. 14000
43. Find the L.C.M. of 15 , 8 , 30
A) 30 B) 120 C) 240 D) 260
44. Solve : $\frac{4a^2 - 20ab + 25b^2}{4a^2 - 25b^2}$
A) $\frac{4a - 5b}{4a + 5b}$ B) $\frac{2a + 5b}{2a - 5b}$ C) $\frac{2a - 5b}{2a + 5b}$ D) $\frac{4a + 5b}{4a - 5b}$
45. Subtract : 9 km 800m - 5km 950 m
A)3km 850 m B) 4km 850m C)4km 50 mD) 4km 200m
46. What is true about a closed cylinder ?
A) Two circular faces & a curved face B) Two curved faces & a circular face
C) All the three circular faces D) Two circular & two plane faces
47. Find the cost of $7\frac{1}{2}$ m of cloth at Rs. $36\frac{2}{5}$ per meter.
A) Rs.237 B) Rs.273 C) Rs.723 D) Rs.732
48. Write the place value of 7 in the fraction 883. 078.
A) 0.8 B) 0.7 C) 0.07 D) 700
49. A poster of length 20 and breadth 16 cm is pasted on a sheet of card board of length 24 and breadth 21 cm . Find the uncovered area .
A) 184 sq. cm . B) 824 sq. cm . C) 194 sq. cm . D) 284 sq. cm .
50. If $(x + y) = 4$, $xy = 8$ then find $x^2 + y^2 = ?$
A) 12 B) 16 C) 0 D) 2

]]]]]]