Baroda High School, ONGC – Primary Section
Morning Shift – (2023 – 24)

Class : VIII **Work Sheet** **Sub :Mathematics**

Choose the correct option :

1. A simple closed curve made up of only line segments is called a ..... .

(a) Circle (b) Polygon (c) Line segment (d) None of them

2. Two adjacent sides AB and BC of a parallelogram ABCD are in the ratio 5 : 3. If the perimeter is 200 cm, what is the length of AB and BC ?

(a) 25 cm & 50 cm (b) 40 cm & 37.5 cm (c) 62.5 cm & 37.5 cm (d) 60 cm & 62.5 cm

3.Which of the following diagonals bisect each other

a)Square b)Kite c)Trapezium (d) rectangle

4)Which of the following all angles are equal

a) Rectangle b)Kite c)Trapezium (d) parallelogram

5)What is the maximum number of obtuse angle that a quadrilateral can have

a) 1 b) 2 c) 3 d) 4

6) How many non overlapping triangles can we make in a n-gon (polygon having n sides) by joining the vertices

a) n-1 b) n-2 c) n-3 d) n -4

7) A quadrilateral whose all sides are equal, opposite angles are equal and the diagonal bisect each other at right angle is a

a) Rhombus b) parallelogram c) square d) none of these

8) Which is the smallest 3-digit perfect square?

a) 100 b) 101 c) 121 d) 144

9) The square root of 12.25 is _____

a) 3.5 b) 2.5 c) 35 d) 25

10) The square of which of the following would be even number?

a) 2826 b) 7779 c) 1057 d) 131

11) The perfect square number between 30 and 40 is

a) 35 b) 39 c)36 d)32

12) How many natural numbers lie between 9^2 and 10^2

a) 15 b) 19 c)18 d)17

13) $\sqrt{0.9}$ = _____

a) 3 b) 0.3 c. 0.03 d.0.33

14) What will be the unit digit of the cube of a number ending with 6?

a) 4 b) 6 c) 2 d) 8

15) Find the cube root of 0.0027

a) 3 b) 0.3 c) 0.003 d) none of these

16) What will be the probability of getting odd numbers if a dice thrown?

a) 1/2 b) 2 c) 4/2 d) 5/2

17) What is the probability of getting the sum as a prime number if two dice are thrown?

a) 5/24 b) 5/12 c) 5/30 d) ¼

18) What will be the probability of losing a game if the winning probability is 0.3?

a) 0.5 b) 0.6 c) 0.7 d) 0.8

Answer the following

1.Find the square root of 64002.

2.Is 90 a perfect square?

3 .Is 2352 a perfect square? If not find the smallest multiple of2352 which is aperfect square. Find the square root of the new number.4.

4. Find the smallest number by which 9408 must be divided so that thequotient is a perfect square. Find the square root of the quotient.5.

5. Without doing any calculation, find the numbers which are surely not perfect square.
i.) 153 ii.) 257 iii) 408 iv.) 4416.

6.Find the square root of the following numbers by the prime factorisationmethod.i.) 400 ii.) 9604 iii.) 8100 iv.)1764 v.) 5929 vi.) 92167.

7.For each of the following numbers, find the smallest whole number by which it should be multiplied so as to get a perfect square. also find the square root of the square number so obtained.i.) 252 ii.) 2925 iii.) 396 iv.) 2028 v.) 1458 vi.) 7688.

8. For each of the following number, find the smallest whole number by which it should be divided so as to get a perfect square. Also find the square root of the square number so obtained.i.) 252 ii.) 180 iii.) 1008 iv.) 2028 v.) 1458 vi.) 7689.

9. The students of class viii of a school donated Rs 2401 in all, for prime minister's national relief fund. each student donated as many rupees as the no: of students in the class. Find the no: of students in the class.10.

10.2118 plants are to be planted in a garden in such a way that each row contains as many plants as the no. of rows. Find the no: of rows and the no: of plants in each row.

11. What is the sum of all the angles of regular pentagon

12. What is the sum of all the angles of regular hexagon

13. What is the sum of all the angles of regular heptagon

14. If the two adjacent angle of a parallelogram are (5x-5) and (10x+35) then the ratio of these angles is what?

15. Evaluate $\sqrt[3]{21.97} + \sqrt{0.0049}$

16. The following table shows the expenditure pattern of a family:

Items	Food	Clothing	Rest	Education	Miscellaneous
Expenditure (in Rs.))	3500	2000	1500	2500	1000

Draw a bar graph to represent the above data.

17. Find the cube root of 0.000512.

18. Find the cube root of $(-\frac{729}{2197})$.

19. ABCD is a rhombus with $\angle ABC = 126$ determine ∠ACD.

20. The adjacent angles of a parallelogram are as 2:3 find the measure of its all angles.

21.The perimeter of a parallelogram is 150 cm. One of its side is greater than the other by 25 cm. F ind the lengths of all sides of the parallelogram.

22.A box of 72 coloured balloons contains the following numbers of each column.Draw a pie chart to show this information.

Colour	Red	Yellow	Green	Blue
Number of Balloons	12	24	20	16

23. A spinner having the numbers 2,3,4,5,6,7 is spun.What is the probability of getting

(a) 4

(b) a prime number?

(c) an even number?

24.Draw histograms for the following frequency distribution

Class interval	0-5	5-10	10-15	15-20	20-25
Frequency	10	25	9	20	5