INTERNATIONAL INDIAN SCHOOL

BURAIDAH

Worksheet For The Academic Year 2026-27

CLASS: VIII SUBJECT: Mathematics DATE: 26/04/2026

LESSON-1 A Square and a Cube

1) A number multiplied by itself gives a ____ number.

2) The squares of odd numbers are _____.

3) The number of zeros at the end of a square number is ____.

4) Number of zeros at the end of ____ numbers is multiples of 3.

5) 2378 is not a ____ number as it ends with the digit 8.

6) _____ numbers end with any digit from 0 to 9.

7) Cubes of even numbers are _____.

8) The ending digit of a) 53^2 is ____ b) 53^3 is ____.

9) Represent the following as the sum of odd numbers:

a) 12^2 b) 8^3

10) Find a) $10^3 - 9^3$ b) $50^3 - 49^3$

11) Find the value of : a) $(\frac{4}{9})^2$ b) $(\frac{5}{7})^3$ c) $(3.05)^2$ d) $(3.2)^3$

12) Check if 169 is a square number using repeated subtraction method.

13) Using prime factorisation method check if :

a) 500 is a square number b) 500 is a cube number.

14) Check if 1728 is a cube number using prime factorisation method.

15) Estimate a) $\sqrt{2401}$ b) $\sqrt{784}$

16) Using Prime Factorisation Method find:

a) $\sqrt{1764}$ b) $\sqrt{2304}$

17) Find $\sqrt{121}$ using repeated subtraction method.

18) Find the cube number corresponding to: 21 + 23 + 25 + 27 + 29

19) Find the smallest number to be multiplied to get a cube number:

a) 243 b) 392 c) 1188

20) Find the smallest number to be multiplied to get a square number:

a) 180 b) 1458 c) 1620

21) Use prime factorisation method and find:

a) $\sqrt[3]{5832}$ b) $\sqrt[3]{13824}$ c) $\sqrt[3]{8000}$

22) Use estimation method to find: a) $\sqrt[3]{74088}$ b) $\sqrt[3]{103823}$

23) Find the smallest square number divisible by a) 4,6,10 b) 3,4,6.

24) a) If $36^2 = 1296$, find 37^2 b) If $51^2 = 2601$, find 52^2 .

25) How many numbers lie between the squares of:

a) 19 and 20 b) 98 and 99

26) Find the side of a square of area 529 cm^2 .

27) 1 , 3 , 6 , 10 , 15 , …… are called _____ numbers.

28) Sum of two consecutive triangular numbers give ____ numbers.

29) Numbers that can be represented as the sum of cubes of two numbers is called _____ numbers.

30) _____ is the smallest Hardy – Ramanujan number.

31) 1729 = _____^{3} + _____^{3} .

32) Write two more examples of Hardy - Ramanujan numbers.

ANSWERS

1) square 2) odd 3) even 4) cube 5) square 6) cube 7) even

8) a) 9 b) 7

9) a) 1 + 3 + …….+ 23 b) 57 + 59 + 61 + 63 + 65 + 67 + 69 + 71

10) a) 1 + 10 x 9 x 3 b) 1 + 50 x 49 x 3

11) a) $\frac{16}{81}$ b) $\frac{125}{343}$ c) 28.372625 d) 32.768 18) 5^3

19) a) 3 b) 7 c) 2 x 11 x 11 = 242 20) a) 5 b) 2 c) 5 23) a) 900 b) 24

25) a) 38 b) 196 26) 23 cm 27) triangular 28) square

29) Hardy – Ramanujan 30) 1729 31) $9^3 + 10^3$ 32) 4104 , 13832