

# Worksheet

Topic - Square, Cube, Power play.

1. By what least number should the given number be multiplied to get a perfect square number? Find the square root of new number.

(i) 9075 (ii) 2475

2. By what least number should the given number be divided to get a perfect square number? Find square root of new number

(i) 4851 (ii) 4056

3. Find largest 4 digit number which is a perfect square.

4. How many natural number between  $38^2$  and  $39^2$ ?

5. Without addition Find

$$7+9+11+13+15+17+19+21+23$$

6. Find value of

$$\sqrt{20 + \sqrt{248 + \sqrt{52 + \sqrt{144}}}}$$

7. Given  $\sqrt{4096} = 64$  then find

$$\sqrt{4096} + \sqrt{40.96} = ?$$

8. By prime factorisation method And

$$\sqrt[3]{9261}$$

9. By using identities find  
 $(107)^2$  and  $(96)^2$

10. By what smallest number should 3600 be multiplied so that the quotient is a perfect cube. Also find the cube root of the quotient.

11. Find the least square number which is exactly divisible by 3, 4, 5, 6, 8.

12. If one side of cube is 15 cm find its volume.

13. A general wishes to draw up his 7500 soldiers in the form of a square. After arrangement he found that some of them are left out. How many left out?

14. What least number should be added to 6200 to make it a perfect square number?

15. Three numbers are in ratio 2:3:5 and sum of their squares is 608. Find the numbers.

16. Find  $\sqrt[3]{27} + \sqrt[3]{0.008} + \sqrt[3]{0.064}$

17. Find  $\sqrt{176 + \sqrt{2386 + \sqrt{221 + \sqrt{16}}}}$

18. Find the smallest number by which 1536 must be divided so that ~~sq~~ quotient will be a cube number. Find cube root of new number.

19.  $\sqrt[3]{125 \times (-64)}$

20. Find the smallest perfect square number which is exactly divisible by 12, 15, 20.