

## Cubes and Cubes Roots Ex 4.1 Q9

## Answer:

We know that the cubes of all even natural numbers are even.

The numbers 216, 512, 1000 and 13824 are cubes of even natural numbers.

The numbers 216, 512, 1000 and 13824 are even and it could be verified by divisibility test of 2, i.e., a number is divisible by 2 if it ends with 0, 2, 4, 6 or 8.

Thus, the cubes of even natural numbers are 216, 512, 1000 and 13824.

## Cubes and Cubes Roots Ex 4.1 Q10

## Answer:

We know that the cubes of all odd natural numbers are odd. The numbers 125, 343, and 6859 are cubes of odd natural numbers.

Any natural numbers could be either even or odd. Therefore, if a natural number is not even, it is odd. Now, the numbers 125, 343 and 6859 are odd (It could be verified by divisibility test of 2, i.e., a number is divisible by 2 if it ends with 0, 2, 4, 6 or 8). None of the three numbers 125, 343 and 6859 are divisible by 2. Therefore, they are not even, they are odd. The numbers 1728, 4096 and 32768 are even.

Thus, cubes of odd natural numbers are 125, 343 and 6859.

