CHAPTER 07

Cubes and Cube Roots

Question:

Find the cube root of -226981.

Sol.

We have, $\sqrt[3]{-226981} = \sqrt[3]{-226981}$

Consider the number 226981.

Since unit's digit of 226981 is '1'. Therefore, unit's digit of its cube root is also '1'.

Numbers obtained by grouping triples $\underset{2^{nd}\ group}{226}\ \underset{1^{st}\ group}{981}$

In second group, we have 226

$\because\ 6^3 < 226 < 7^3$

The smallest number of 6 and 7 is 6, which is the ten's digit of the cube root 226981.

Hence, $\sqrt[3]{226981} = 61$

$\because\ \sqrt[3]{-226981} = -\sqrt[3]{226981} = -61$