

H/W
3/8/21

Cubes and cube roots

i) $1 \rightarrow 1331 = 1$ is the ones digit and 1 ones cube will be $= 1^3 = 1$

ii) $8888 = 888$ is the ones digit and 8 eights cube will be $= 8^3 = 512$

iii) $149 = 9$ is the ones digit and 9 nines cube will be $= 9^3 = 729$

iv) $1005 = 5$ is the ones digit and 5 fives cube will be $= 5^3 = 125$

v) $1024 = 4$ is the ones digit and 4 fours cube will be $= 4^3 = 64$

vi) $77 = 7$ is the ones digit and 7 sevens cube will be $= 7^3 = 343$

vii) $5022 = 2$ is the ones digit and 2 twos cube will be $= 2^3 = 8$

viii) $53 = 3$ is the ones digit and 3 threes cube will be $= 3^3 = 27$

27) $6^3 = n \times 5 + 1 = 6 \times 5 + 1 = 30 + 1 = 31 + 33 + 35 + 37 + 39 + 41 = 216$

b) $8^3 = n \times 5 + 1 = 8 \times 5 + 1 = 40 + 1 = 41 + 43 + 45 + 47 + 49 + 51 + 53 + 55 = 512$

c) $7^3 = 7 \times 5 + 2 = 37 + 39 + 41 + 43 + 45 + 47 + 49 = 343$

3) $400 = \text{No}$ it is not a perfect cube.

2) 3375 = Yes it is a perfect cube of 15

3) 80000 = Yes it is a perfect cube of 20

4) 15625 = NO it is not a perfect cube

5) 9000 = Yes it is a perfect cube of 30.

6) 6859 = NO it is not a perfect cube

7) 392 = $2 \overline{) 392}$

$$\begin{array}{r} 2 \overline{) 392} \\ 2 \overline{) 196} \\ 7 \overline{) 784} \\ 7 \end{array}$$

\therefore We should multiply 7 to make it a perfect. As we are not getting 7 as pair

8) 53240. We should 5 to make it a perfect square 5 is not becoming with any other so it can become a perfect cube

9) 1188 = the smaller number divided will be 44 to make it a perfect cube.

10) 68600 = 5 is the number that should be multiplied to make it a perfect cube.