Cube Root

Tuesday, March 23, 2021 9:43 AM

$1^3 = 1$

$2^3 = 8$

$3^3 = 27$

$4^3 = 64$

$5^3 = 125$

$6^3 = 216$

$11^3 = 1331$

$12^3 = 1728$

$13^3 = 2197$

$7^3 = 343$

$8^3 = 512$

$9^3 = 729$

$10^3 = 1000$

Eg. $\sqrt[3]{12\,167}$

$7^3 = 343$

$2^3 < 12 < 3^3$

$8 < 12 < 27$

23

Sol. $\sqrt[3]{175\,616}$

$5^3 < 175 < 6^3$

$125 < 175 < 216$

$6^3 = 216$

56

$\Rightarrow$

$3 \leftrightarrow 7$

$2 \leftrightarrow 8$

$1 \leftrightarrow 1$

$4 \leftrightarrow 4$

$5 \leftrightarrow 5$

$6 \leftrightarrow 6$

$9 \leftrightarrow 9$

$10 \leftrightarrow 0$

Ex $\sqrt[3]{46656}$

Ex $\sqrt[3]{103823}$

Ex $\sqrt[3]{405224}$

$4^3 \to 64$

74

7^3 8^3

$343 < 405 < 512$