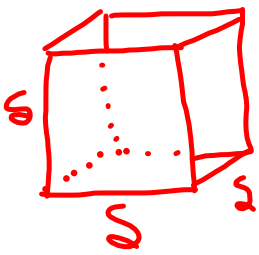
Chap 1 Sec 2

Find Cube Roots

1) $V = 27{,}000\ cm^3$ what $\#^3 = 27{,}000$

$30^3 = 27{,}000$



3) $\sqrt[3]{125} = \sqrt[3]{5^3} = 5$

4) $\sqrt[3]{-1} = \sqrt[3]{(-1)^3} = -1$

9) $\sqrt[3]{-\frac{1}{64}} = \frac{\sqrt[3]{-1}}{\sqrt[3]{64}} = \frac{\sqrt[3]{(-1)^3}}{\sqrt[3]{(4)^3}} = -\frac{1}{4}$

7) $\sqrt[3]{8000} = \sqrt[3]{(20)^3} = 20$

10) $\sqrt[3]{0.001} = \sqrt[3]{(0.1)^3} = 0.1$

6) $\sqrt[3]{-1331} = \sqrt[3]{(-11)^3} = -11$

11) $5 + (\sqrt[3]{8})^3$

$5 + (\sqrt[3]{8} \cdot \sqrt[3]{8} \cdot \sqrt[3]{8})$

$5 + \sqrt[3]{8 \cdot 8 \cdot 8}$

$5 + \sqrt[3]{(8)^3}$

$5 + 8$

13

12) $4\sqrt[3]{-729} - 3$

$(4)(\sqrt[3]{(-9)^3}) - 3$

$(4)(-9) - 3$

$-36 - 3$

-39

13) $\frac{2}{3} - \sqrt[3]{-\frac{1}{27}}$

$\frac{2}{3} - \frac{\sqrt[3]{(-1)^3}}{\sqrt[3]{(3)^3}}$

$\frac{2}{3} + \frac{+1}{3}$

$\frac{3}{3} = 1$