Simplify

$\sqrt[2]{\sqrt[3]{x^1}}$ → $x^{\frac{1}{3} \cdot \frac{1}{2}} = x^{\frac{1}{6}}$

$\sqrt[6]{x^1}$

Simplify

$\sqrt[2]{2} \cdot \sqrt[3]{2}$

$2^{\frac{1}{2}} \cdot 2^{\frac{1}{3}}$

$2^{\frac{3}{3} \cdot \frac{1}{2} + \frac{1}{3} \cdot \frac{2}{2}}$ → $2^{\frac{3+2}{6}}$ → $2^{\frac{5}{6}}$ → $\sqrt[6]{2^5}$

$\sqrt[6]{32}$