

Simplify

a. $\sqrt{32x^3y}$

b. $\sqrt[3]{-16x^6y^5}$

$$\begin{aligned} A. & \sqrt{32x^3y} \\ &= \sqrt{16 \cdot 2 \cdot x^2 \cdot xy} \\ &= 4|x| \sqrt{2xy} \end{aligned}$$

$$\begin{aligned} B. & \sqrt[3]{-16x^6y^5} \\ &= \sqrt[3]{(-2)^3 \cdot 2 \cdot (x^2)^3 \cdot y^3 \cdot y^2} \\ &= -2x^2y \cdot \sqrt[3]{2y^2} \end{aligned}$$