Pulling out cubed terms, you find that  $\sqrt[3]{-216x^8y^{13}} = \sqrt[3]{(-6)^3 \cdot (x^2)^3 \cdot x^2 \cdot (y^4)^3 \cdot y}$ . This expression simplifies to  $-6x^2y^4\sqrt[3]{x^2y}$ .