

Simplify

$$-27^{-\frac{4}{3}}$$

$$\left(a^{\frac{1}{3}} a^{\frac{1}{4}}\right)^{12}$$

$$\left(\frac{100}{9}\right)^{-\frac{3}{2}}$$

$$\left(\frac{m^{-\frac{1}{4}}}{n^{-\frac{1}{2}}}\right)^{-4}$$