

QUESTION Simplify $\frac{x(x^2)^{\frac{1}{3}}}{x^{\frac{1}{2}}}$

ANSWER

$$\frac{x(x^2)^{\frac{1}{3}}}{x^{\frac{1}{2}}} = \frac{xx^{\frac{2}{3}}}{x^{\frac{1}{2}}} = x^{1+\frac{2}{3}-\frac{1}{2}} = x^{\frac{7}{6}}$$