

Functions & Trig.
Operations with Rational Expo HW

Name _____

1.) Explain how $\left(4^{\frac{1}{3}}\right)^2$ can be written as the equivalent radical expression $\sqrt[3]{16}$.

2.) Write $x\sqrt[4]{x^3}$ as a single term with a rational exponent.

3.) Write $\sqrt{16x^2} \cdot x^{\frac{2}{3}}$ as a single term with a rational exponent.

4.) Write $\sqrt[3]{a^2b^4} \cdot \sqrt[3]{a^3b^2}$ as a single term with a rational exponent.

5.) Write $(4x^3)^{\frac{3}{2}}$ in simplest radical form.

6.) Write $\frac{\sqrt{x}}{\sqrt[4]{x}}$ as a single term with a rational exponent.