Exercise 12

Radicals and Exponents Write each radical expression using exponents, and each exponential expression using radicals.

Radical expression		n Exponential expression
12.		$10^{-3/2}$

Solution

Write the exponential expression as a radical expression.

$$10^{-3/2} = \frac{1}{10^{3/2}} = \frac{1}{10^{3(\frac{1}{2})}} = \frac{1}{(10^3)^{1/2}} = \frac{1}{\sqrt{10^3}}$$