

Exercise 16

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

	Radical expression	Exponential expression
16.	$\frac{1}{\sqrt{x^5}}$	<input type="text"/>

Solution

Write the radical expression as an exponential expression.

$$\frac{1}{\sqrt{x^5}} = \frac{1}{(x^5)^{1/2}} = \frac{1}{x^{5(\frac{1}{2})}} = \frac{1}{x^{5/2}} = x^{-5/2}$$