

**Exercise 259**

For the following exercises, write the equation in equivalent logarithmic form.

$$\sqrt[3]{64} = 4$$

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**Solution**

Rewrite the given equation.

$$64^{1/3} = 4$$

The base of the logarithm is 64, the exponent is the logarithm, and the result is the argument.

$$\log_{64} 4 = \frac{1}{3}$$