

Exercise 281

For the following exercises, solve the exponential equation exactly.

$$10^x = 7.21$$

Solution

Take the logarithm of both sides.

$$\log 10^x = \log 7.21$$

Use the property of logarithms that allows the exponent to be brought down in front.

$$x \log 10 = \log 7.21$$

$$x(1) = \log 7.21$$

$$x = \log 7.21$$