

What exponent do you raise 3 to the power of to get 9?

$$3^x = 9$$

The answer is

$$= 2$$

Therefore the solution to the equation $3^x = 9$ is

2 is the exponent you raise base 3 to, to get 9.

$$= \log$$

Logarithmic Form

$$=$$

Exponential Form

3 is the exponent you raise base 2 to, to get 8.

$$= \log$$

Logarithmic Form

$$=$$

Exponential Form

$\frac{4}{3}$ is the exponent you raise base 8 to, to get 16.

$$= \log$$

Logarithmic Form

$$=$$

Exponential Form

$$8^{\frac{4}{3}} = \left[8 \right] = \left[\quad \right] =$$

What is $\log_8 16$?

Translation: What do you raise 8 to the power of to get 16?