

# BLOCKCHAIN TUTORIAL 8

## Logarithms

$$x = \log_4 (65536)$$

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Logarithms

# LOGARITHMS

- $2^3 = 2 \times 2 \times 2 = 8$
- 2 is called the base
- 3 is called the exponent and determines the number of times the base should be multiplied
- 8 is called the product
- Suppose exponent  $x$  is unknown?  $2^x = 8$
- If you are only interested in the exponent, the mathematical notation:  $x = \log_2 (8)$
- You pronounce it as:  $x = \log$  base 2 of 8

# LOGARITHMS

- Exponentials  $x = 2^3$  and logarithms  $x = \log_2 (8)$  are each other opposites.
- The purpose of this video is not to teach you how to do logarithm calculations but just to explain what a logarithm is.
- How to calculate  $x = \log_4 (65536)$  on your calculator?
- Enter on your calculator  $\log (65536) / \log (4)$
- If there is no base, the value 10 is assumed