SCIU4T4 logarithms

Logarithms

Exponent to which a number needs to be raised to get another number,

$$10^3 = 1000.$$

10 raised to the power of 3 equals 1000,

$$\log_{10}(1000) = 3.$$

Logarithms in figures

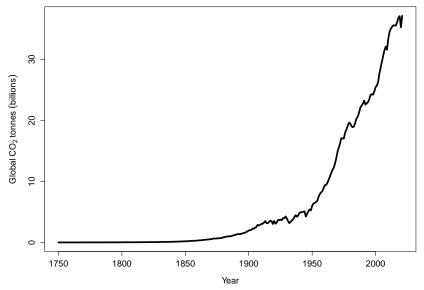


Figure 1: Global carbon dioxide emissions from 1750-2021.

Logarithms in figures

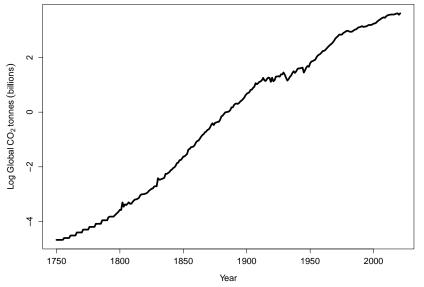


Figure 2: Natural logarithm of global carbon dioxide emissions from 1750-2021.

Natural logarithms

Exponent to which a number needs to be raised to get another number,

$$e^1 \approx 2.718282$$
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Sometimes log denoted 'ln',

$$\ln(2.718282) = 1.$$