

The formula may be rearranged to give

$$A_1 = 10^{\frac{L_{\text{dB}}}{20}} A_0$$

Similarly, in electrical circuits, dissipated power is typically proportional to the square of voltage or current when the impedance is held constant. Taking voltage as an example, this leads to the equation:

$$G_{\text{dB}} = 20 \log_{10} \left(\frac{V_1}{V_0} \right)$$

where V_1 is the voltage being measured, V_0 is a specified reference voltage, and G_{dB} is the power gain expressed in decibels. A similar formula holds for current.