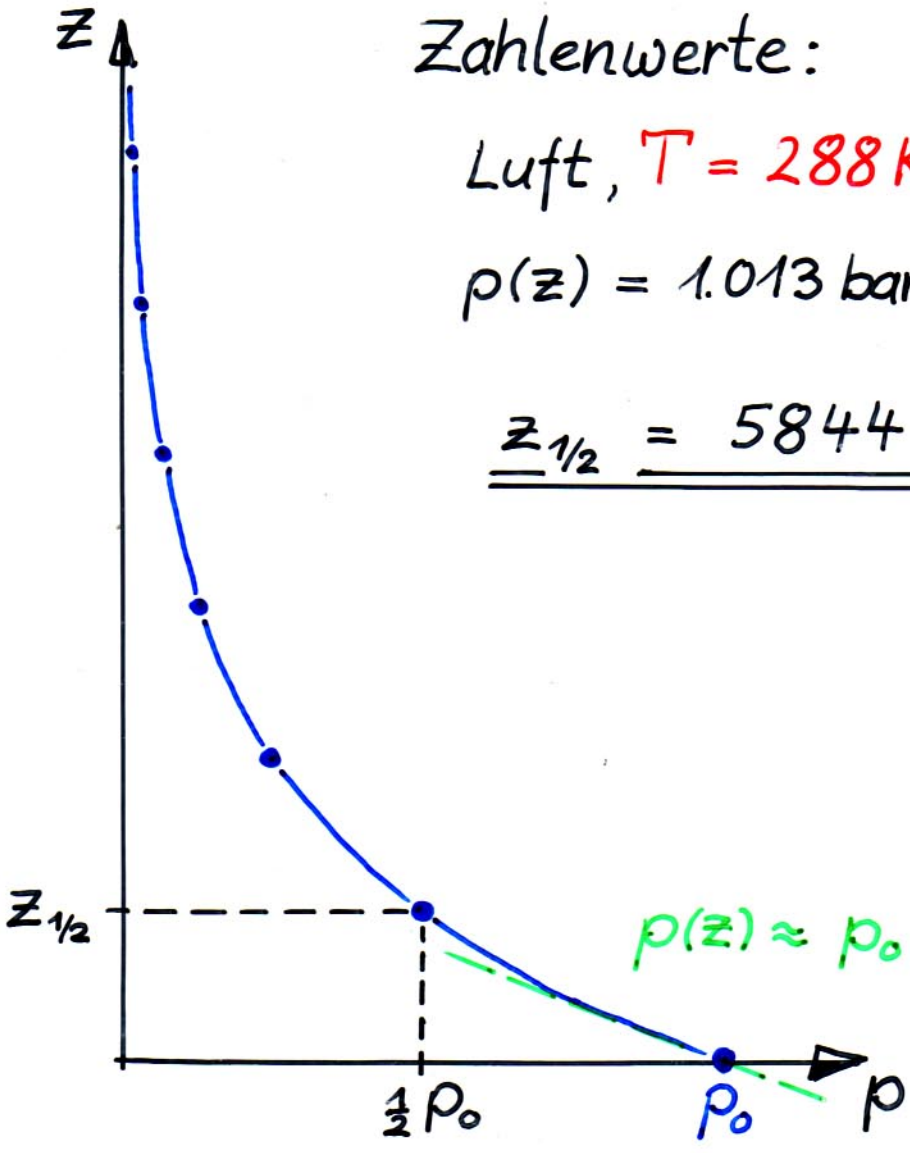
Die Barometerformel

$$p(z) = p_0 \exp\left[-\frac{\rho_0}{p_0} g z\right]$$

$$= p_0 \exp\left[-\frac{mg}{kT} z\right]$$



Zahlenwerte:

Luft, $T = 288\,K$ (15°C)

$$p(z) = 1.013\,bar \exp\left(\frac{-z}{8432\,m}\right)$$

$$z_{1/2} = 5844\,m$$

$p(z) \approx p_0 - \rho_0 g z$
(kleine Höhen)