



$$\frac{dp}{dz} = -G$$

$$p = \rho g$$

$$\frac{\rho g}{dz} = -\frac{G}{R}$$

$$\frac{dg}{g} = -\frac{G}{R} dz$$

$$G = \frac{\rho}{\rho_0}$$

$$g(z) = \exp\left(-\frac{z}{G} + \frac{z_0}{G}\right) g_0$$

$$f_1(H) = f_0 \exp\left(-\frac{H}{G_1} + \frac{z_0}{G_1}\right) \quad z_0 = 0$$

$$f_2(H) = f'_0 \exp\left(-\frac{H}{G_2} + \frac{z'_0}{G_2}\right) \quad z'_0 = H$$

$$P_1 = P_2 \Rightarrow R_1 \cdot f_1(H) = R_2 f_2(H)$$

$$R_1 f_0 \cdot \exp\left(-\frac{H}{G_1}\right) = R_2 f'_0$$

$$f_0 = N \cdot m_1$$

$$f'_0 = N \cdot m_2$$

$$R_1 \cancel{m_1} \exp\left(-\frac{H}{G_1}\right) = R_2 \cancel{m_2} \cdot 2$$

$$R_2 = \frac{R_1}{2} \exp\left(-\frac{H}{G_1}\right)$$