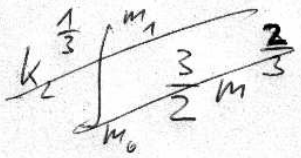
(4) (2P)

$$m^{-\frac{1}{3}} k_2^{\frac{1}{3}} \, dm = k_1 \, dt \qquad | \int$$



$$k_2^{\frac{1}{3}} \int_{m_0}^{m_1} m^{-\frac{1}{3}} \, dm = k_1 \int_{t_0}^{t_1} dt$$

$$k_2^{\frac{1}{3}} \left[\frac{3}{2} m^{\frac{2}{3}} \right]_{m_0}^{m_1} = k_1 t \Big|_{t_0}^{t_1} = k_1 (t_1 - t_0) \qquad | t_0 = 0$$

$$k_2^{\frac{1}{3}} \frac{3}{2} \left[m_1^{\frac{2}{3}} - m_0^{\frac{2}{3}} \right] = t_1 \, k_1$$

$$\left[\frac{g}{cm^3} \right]^{\frac{1}{3}} \qquad \left[g^{\frac{2}{3}} \right] \qquad [s] \left[\frac{kg}{m\,s} \right]$$

$$\frac{g^{\frac{1}{3}+\frac{2}{3}}}{cm^{\frac{3}{3}}} = \frac{g}{cm^1} \quad \triangleq \quad \frac{kg}{m}$$

Von den Einheiten kommt es gut, nehmt SI-Einheiten!
Nicht wie ich cm, g und so Zeug.