Svör

Dæmi 1 $[P] = \mathrm{kg\,m^2/s^3}, [G] = \mathrm{m^3/(kg\,s^2)}, [\epsilon_0] = \mathrm{s^2C^2/(kg\,m^3)}$

Dæmi 2 $\omega = 2\pi\sqrt{\frac{MG}{R^3}} = 3{,}94 \cdot 10^{-3}\,\mathrm{1/s}.$

Dæmi 3 $[L_P] = \sqrt{\frac{\hbar G}{c^3}} = 1{,}28 \cdot 10^{-30}\,\mathrm{m}$, $[t_P] = \sqrt{\frac{\hbar G}{c^5}} = 4{,}26 \cdot 10^{-37}\,\mathrm{s}$, $[m_P] = \sqrt{\frac{\hbar c}{G}} = 1{,}73\,\mu\mathrm{g}.$

Dæmi 4

Dæmi 5 $\tau = \frac{c\rho D^2}{\kappa}.$

Dæmi 6 $P_{\mathrm{rad}} = \frac{1}{6\pi}\frac{a^2q^2}{c^3\varepsilon_0}$

Dæmi 7

Dæmi 8 $r_0 = \frac{1}{\rho_c}\sqrt{\frac{p_c}{G}}$

Dæmi 9

Dæmi 10

Dæmi 11

Dæmi 12

Dæmi 13 $E(x) \approx \frac{qd}{2\pi\varepsilon_0 x^3}\,.$

Dæmi 14 $1{,}63\,\mathrm{s}.$

Dæmi 15

Dæmi 16