

6. Rest-mass energy is given by

$$E_0 = m c^2$$

$$E_0 = (9.11 \times 10^{-31} \text{ kg}) (3 \times 10^8 \text{ m / s})^2$$

$$E_0 = (9.11 \times 10^{-31}) (9 \times 10^{16}) \text{ J}$$

$$E_0 = 8.2 \times 10^{-14} \text{ J}$$