(6.4) Calculate the nuclear Landé factor for ^{11}B.

eqn (6.27) $\mu(\text{nucleus}) = g_I B_n m_I$ where g_I is the nuclear landé factor and m_I is the magnetic quantum number given by $-I < m_I < I$. From Table 6.3 and ^{11}B we get $I = 3/2$ and $\mu_I = 2.689 * B_n$. Hence,

$B_n := 5.051 \cdot 10^{-27} \cdot \frac{joule}{tesla}$ $\mu_I := 2.689 \cdot B_n$ $I := \frac{3}{2}$ $m_I := I$

$g_I := \frac{\mu_I}{B_n \cdot m_I}$ $g_I = 1.793$ $= 2.689*2/3$