

59. Combining Eq. 32-7 with Eq. 32-2 and Eq. Eq. 32-3, we obtain

$$\Delta U = 2 \mu_B B$$

where μ_B is the Bohr magneton (evaluated in Eq. 32-5). Thus, with $\Delta U = 6.0 \times 10^{-25}$ J, we find $B = |\vec{B}| = 0.032$ T.