

77. (a) $i_0 = \mathcal{E}/R = 100\text{ V}/10\,\Omega = 10\text{ A}.$
(b) $U_B = \frac{1}{2}Li_0^2 = \frac{1}{2}(2.0\text{ H})(10\text{ A})^2 = 100\text{ J}.$