41. It is possible (though tedious) to use Eq. 29-26 and evaluate the contributions (with the intent to sum them) of all 200 loops to the field at, say, the center of the solenoid. This would make use of all the information given in the problem statement, but this is not the method that the student is expected to use here. Instead, Eq. 29-23 for the ideal solenoid (which does not make use of the coil diameter) is the preferred method:

$$B = \mu_0 i n = \mu_0 i \left(\frac{N}{\ell} \right)$$

where $i = 0.30$ A, $\ell = 0.25$ m and $N = 200$. This yields $B = 0.0030$ T.