

Homework Assignment #26

(due Nov 4, 2022, at the beginning of class)

1. Griffiths 5.14

Hint: For part (b) $J = k s$. Express k with I by using the equation you obtain for $\int J da = I$.

2. Griffiths 5.15

Hint: You may use that by symmetry $B = 0$ for $z = 0$.

3. Griffiths 5.16

Hint: First rederive the \vec{B} -field for a single solenoid, that is Eq. (5.59). Then solve the problem with two solenoids. In each case make sketches and include the corresponding Ampèrian loop.