Physics 606 Homework #6 Spring '20
Dr. Drake

1. Jackson 5.8

2. Jackson 5.10(a). In part (c) calculate the components of **B** as requested. Don't evaluate **B** along the z axis as requested. Instead, take the limit $z = 0$, show that $B_\rho = 0$ and evaluate B_z for $\rho = a - \epsilon$ with ϵ small. In this limit you can complete the integral over k. Show that the integral diverges as ϵ goes to zero. Interpret the latter.