

**Homework 11**  
**EE381-1 Electric & Magnetic Fields (Fall 2018)**  
**Wednesday, November 14, 2018**

- 1) 7.14 Use Biot-Savart Law
- 2) Find the magnetic field along the  $z$ -axis due the surface current  $\vec{J}_s = -\hat{a}_\phi 400$  A/m flowing on a flat ring located on the  $z = 0$  plane described by  $8\text{cm} \leq \rho \leq 12\text{cm}$ . Also, plot the magnitude of the magnetic field from  $-36\text{ cm} < z < 36\text{ cm}$  along the  $z$ -axis.
- 3) 7.20
- 4) 7.23
- 5) 7.34
- 6) 7.37
- 7) 7.40
- 8) 7.51

**Due Monday, November 19, 2018.**