**Homework 1**

1. What are Host, Network Device, Peripheral device, Guided Media, and Unguided Media?
2. Suppose there is a 10 Mbps microwave link between a geostationary satellite and its base station on Earth. Every minute the satellite takes a digital photo and sends it to the base station. Assume a propagation speed of 2.4x108 meters/sec. (long answer)
   1. What is the propagation delay of the link?
   2. What is the bandwidth-delay product, R · dprop?
   3. Let x denote the size of the photo. What is the minimum value of x for the microwave link to be continuously transmitting?
3. Why are standards important for protocols?
4. What are the five layers in the Internet protocol stack? What are the principal responsibilities of each of these layers?
5. What is Internet Exchange Point (IX)? (see the video)
6. What Wireshark tool is used for? What’s the information that you could have from the tool?