

- 1) In terms of physical media, what is multiplexing  
Merging multiple communication streams onto the same medium
- 2) What is the role of physical media in access networks.  
The physical media is physical link in the chain between sender/receiver pairs. Analog signals relating to bits propagate over/through the physical media
- 3) What are some examples of guided media, and where are they used?  
Cups with a string connecting them, twisted pair copper wires, coaxial cables, waveguide cabling (fiber-optic), etc... These are used in ADSL, cable internet
- 4) What are some examples of unguided media, and where are they used?  
Human speech, broadcast wireless, etc... Used in cellular networks, 802.11b/g/n
- 5) What is the benefit of broadband cabling over baseband cabling?  
Broadband cabling can utilize a greater range of frequencies in transferring information. This allows more data to be transferred over this type of cabling.
- 6) Communication via guided media is complex enough by itself, but communication via unguided (wireless) media is even more complicated. What are some additional difficulties of wireless networking?
  - Wireless signals are more vulnerable to interference and noise.
  - Wireless signals may be blocked, especially by metal.
  - Wireless signals may reflect and interfere with other wireless signals.
  - (Other answers are possible.)