1. How would you determine if a ground loop is the cause of a hum you hear in an audio chain consisting of two mono devices connected in series with balanced cables? If it is a ground loop, how can it be eliminated?

2. Identify the audio connectors. Which can be used for unbalanced connections? Which can be used for balanced connections? Name a common audio device using each type.
3. Match these common op-amp audio circuits with their function:

A.  

B.  

C.  

D.  

E.  

F.  

G.  

1. buffer amplifier  
2. inverting amplifier  
3. non-inverting amplifier  
4. summing amplifier  
5. low-pass filter  
6. high-pass filter  
7. balanced (differential) input amplifier