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# Questions "Tonmeister" 73 - English

UdK Berlin  
Sengpiel  
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F + A

1. A home cinema system has five full-range speakers. Each of the five speakers produce a sound pressure level of 80 dB at the listening position. How much is the sum total sound pressure level at the listening position?

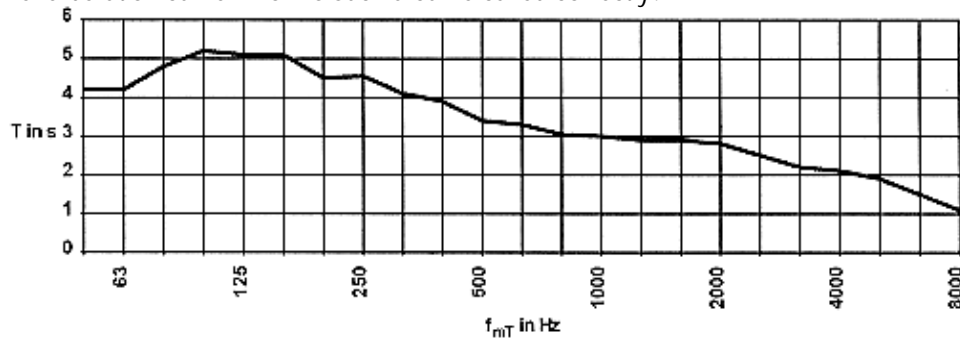
See: Acoustic level addition: <http://www.sengpielaudio.com/Rechner-spl.htm>

2. The reverberation time is defined as the time interval within which the sound level has decreased by 60 dB in a room with sudden silence. **a)** How much of the initial sound pressure value is the sound pressure dropped? **b)** How much of the initial sound intensity value is the sound intensity dropped?

a)

b)

3. Here is a "reverberation curve". How is such a curve called correctly?

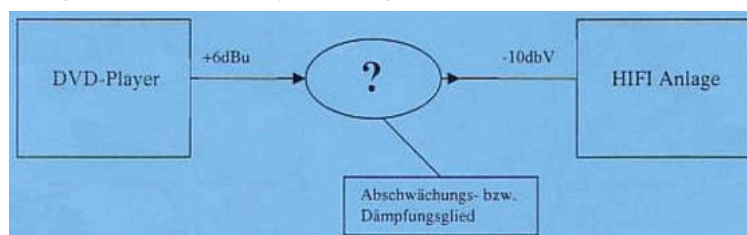


4. What is a frequency response?

5. What math is related to speed of sound, frequency and wavelength of the sound?

6. Why does the intonation of wind instruments get lower with decreasing air temperature?

7. A professional DVD player with a maximum output level of +6 dBu shows audible distortions when connected to a stereo equipment because the input of the system is overloaded. The maximum input level must be less than -10 dBV. **a)** By what factor the voltage of the DVD player must be dampened to get the correct level? **b)** By how many decibels is the output signal of the DVD player too high?



a)

b)