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# Questions of "Tonmeistertest"

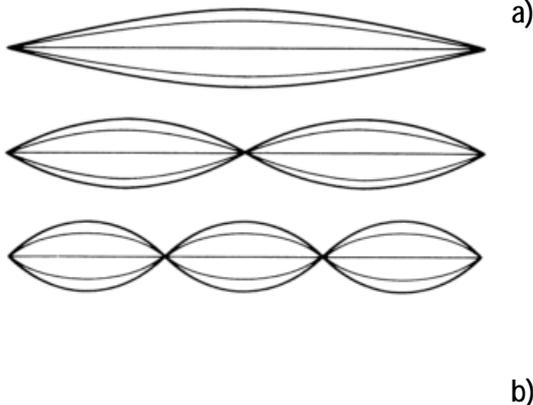
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1. How much is the electric value of an alternative current (AC) resistance (an ohm's resistance) of  $R = 1$  Meg-ohm at a frequency of  $f = 1$  MHz?

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F + A

2. A light bulb is usually used with alternative current (AC) of 50 Hz. With which frequency the light of the lamp is radiated?

3. Especially in small rooms we get by excitation at low frequencies between two opposite walls always standing waves, the so-called room modes. Often we find roughly the following picture of the first three axial room modes. a) What is really shown here? b) What should be the correct representation of the wall reflections showing standing waves?



4. The microphone manufacturer's data sheet by Georg Neumann tells the transfer factor (sensitivity) of the condenser microphone KM 130: **12 mV / Pa**. Your American sound engineer friend would like to understand this information. How big is the "power level" in dB for the microphone KM130? This is the "sensitivity in dB re 1 V / Pa", see: <http://www.rcisound.com/media/MC018.pdf>

Sensitivity =

See: <http://www.sengpielaudio.com/Rechner-sensitivity.htm>

5. This sound engineer tells you for his cardioid dynamic microphone Electro Voice RE20 the given power level **-56.5 dB** at 1.000 Hz. "Power" always sounds good, but really meant is the sensitivity **-56.5 dB** re 1 V / Pa. You want to understand these given data. How big is the transfer factor in mV / Pa for the RE20 dynamic microphone?

Transfer factor =

See: <http://www.sengpielaudio.com/Rechner-sensitivity.htm>