

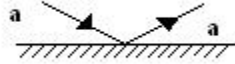
1.

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\* -

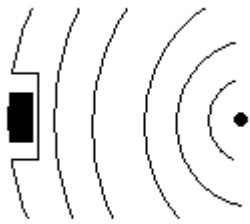
: - 383 m/s  
- 1500m/s

- P [pa] -

)



$$\frac{\sin \Gamma}{\sin S} = \frac{v_1}{v_2}$$



2.

< 16 (20) Hz ÷ 20 kHz <

)

- 3.10<sup>-5</sup>

)

- = 20

-

I [V/m<sup>2</sup>]

- L

$$L = 10 \lg \frac{I}{I_0} = 20 \lg \frac{P}{P_0} \text{ [dB]}$$

L [Phon] -

1kHz => 1Phon = 1dB

3.

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5.

6.

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7.

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) - , , .

8.

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