

Decibels ACT

- If 1 person can shout with loudness 50 dB. How loud will it be when 100 people shout?

1) 52 dB

2) 70 dB

3) 150 dB

$$\beta_{100} - \beta_1 = (10 \text{ dB}) \log_{10}(I_{100}/I_1)$$

$$\beta_{100} = 50 + (10 \text{ dB}) \log_{10}(100/1)$$

$$\beta_{100} = 50 + 20$$