

37.1 A plant room contains a generator with a noise level of 95dBA , an air compressor with a noise level of 88dBA , and a pump with a noise level of 77dBA . What is the overall noise level?

- A. 87dB
- B. 95dB
- C. 96dB
- D. 98dB

Refer to the table for **Combining Two Sound Levels**. Note that when the difference between the dB levels of two sources is between 5 and 9, the number of dB to be added to the highest source is 1dB . Also recall that only two sources may be added at once; the table provides no guidance on adding more than two sources.

Start by combining the two loudest sources.

$$95\text{dB} + 1\text{dB} = 96\text{dB}$$

Regarding the pump noise, recognize that the difference between the noise levels between the pump and combined generator and compressor fall into the '10 dB or more' range, therefore, there is no meaningful difference to the combined level.

Answer C