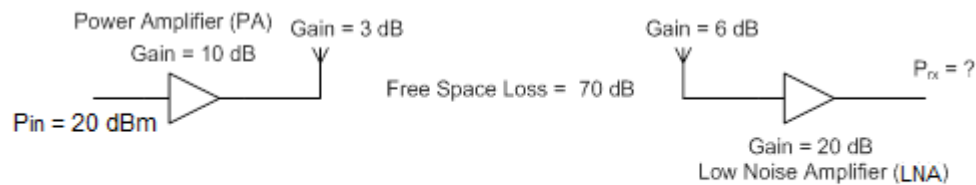


## Tutorial 01

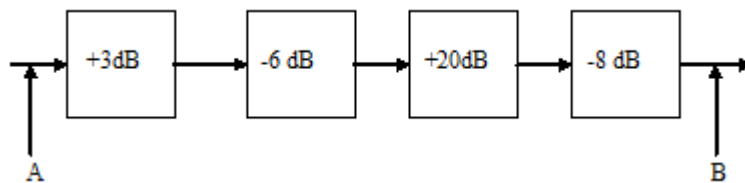
### MCQ No. 2



$$P_{rx} = P_{in} + G_{PA} + G_{TXant} - FSL + G_{RXant} + G_{LNA}$$

You can substitute the values shown in the picture into the link equation to get the correct answer for  $P_{rx}$ .

### MCQ No. 6



First, you need to find the total gain or loss of the above system by algebraically adding all the numbers.

Then, add the total gain or loss of the above system to the Input power A of each option to find out the correct answer for the Output power B option.

### MCQ No. 8

The bandwidth of the telephone line can be obtained by subtracting the lower cut off frequency from the upper cut off frequency.

### MCQ No. 15

$$10 \log (1W) = 0 \text{ dBW}$$

$$10 \log (1000 \text{ mW}) = 30 \text{ dBm}$$

Hence, the difference between dBm and dBW  $\rightarrow 30 \text{ dB}$

