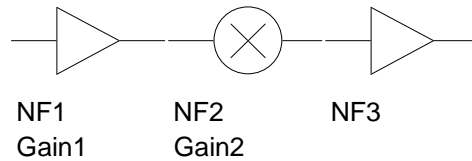


Cascaded Noise Figures



$$NF_{TOT} = NF_1 + \frac{NF_2 - 1}{Gain_1} + \frac{NF_3 - 1}{Gain_1 \cdot Gain_2} + \frac{NF_4 - 1}{Gain_1 \cdot Gain_2 \cdot Gain_3} + \dots$$

Where:

NF and *Gain* are the linear numbers, i.e.:

$$NF = 10^{\frac{NF[dB]}{10}}$$

$$Gain = 10^{\frac{Gain[dB]}{10}}$$

Some examples:

NF1 [dB]	Gain1 [dB]	NF2 [dB]	Gain2 [dB]	NF3 [dB]	NFTOT [dB]
3	10	5	10	5	3.49
3	10	5	5	5	3.58
3	10	5	10	10	3.62
3	10	5	5	10	3.97
3	5	5	10	5	4.39
3	5	5	5	5	4.62
3	10	10	10	5	4.65
3	5	5	10	10	4.72
3	10	10	5	5	4.72
3	10	10	10	10	4.75
3	10	10	5	10	5.02
3	5	5	5	10	5.54
3	5	10	10	5	6.91
3	5	10	5	5	7.04
3	5	10	10	10	7.10
3	5	10	5	10	7.59
5	10	10	5	5	6.16