



Bits vs. dBs

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Solution: The measurement resolution of many measurement instruments is representend in bits of resolution.

Sometimes, it is convenient to show this in decibels (dB).

Simply take the bits of resolution and calculate the number of steps:

Step resolution = 2^N , where N is the number of bits of resolution

Then, calculate the dBs by:

$dB = 20\text{Log}(\text{Step Resolution})$

Here is a convenient table:

Bits	Resolution Steps	dB
2	4	12
4	16	24
6	64	36
8	256	48
12	4096	72
16	65536	96
24	1677216	144



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