## Exponential and Logarithmic Functions Part 1

## 13 OCTAVES IN MUSIC

- a. The difference between the frequencies 30 Hz and 50 Hz is 1 octave. Find total number of octaves.
- b. An amplitude of 52 dB at 4 kHz decreases as frequency increases at -2 dB/oct. Find the difference in octaves at 13 kHz.
- c. If the difference between octaves are 10. How much intense the second frequency is?
- d. Two frequencies are producing difference in octaves up to 16. If first frequency is 32 Hz, find the second.
- e. If ratio of both frequencies should be 8. Then find the difference between octaves in both frequencies.

