Wednesday, May 11, 2011
9:00 AM
A beat is a result of destructive interference of 2 waves of ALMOST the same frequency ( $f_{1}, f_{2}$ )

How often beats occur is called the beat frequency and is simply the difference between $f_{1}$ and $f_{2}$.

$$
f_{\text {beats }}=\Delta f=f_{1}-f_{2}
$$

Two waves of frequency 200 Hz and 210 Hz are produced. What will be the beat frequency? $210-200=10 \mathrm{~Hz}$

Two cars with identical horns emit a sound at 300 Hz . A stationary observer stands next to one of the cars which is parked, the second car drives toward the observer at $40 \mathrm{~m} / \mathrm{s}$ what beat frequency is heard?


