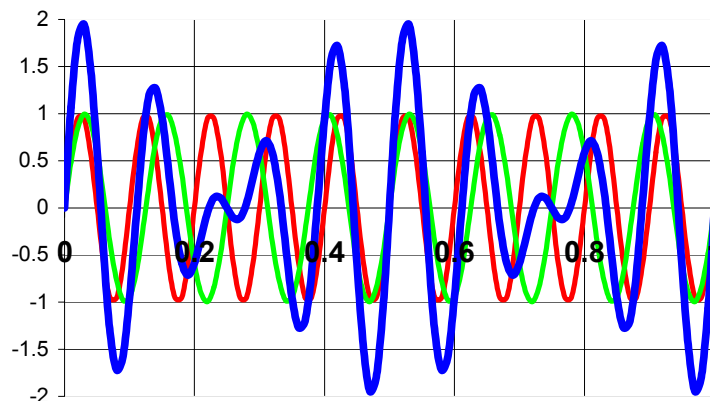


Now let's try another – 8 “green” waves and 10 red ones:

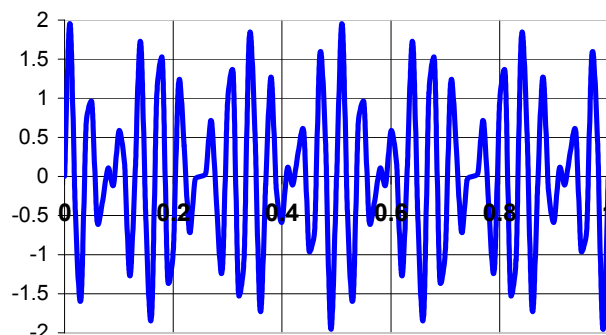


Beat frequency = 2Hz (two complete blue wave cycles)

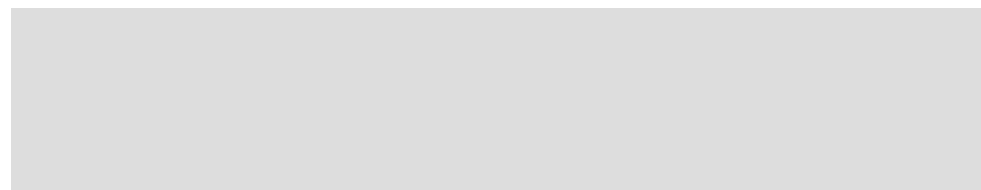
Other method: beat frequency = $|f_1 - f_2| = |8 - 10| = 2$

Example T10.2

The following wave-diagram shows the resultant wave produced when two sounds waves are sounded together. If the sound with the lowest frequency is 24Hz, and the wave-diagram shows the resultant wave over a time of 1 second, what is the beat frequency and what is the frequency of the second sound?



Solution:



The next example shows beats produced by sounds of frequency 100 Hz and 106 Hz, over 1 second. Beat frequency = 6 Hz

