

Assignment 7

Due: 11/13/2017

(1) Consider a pure tone with frequency $f = 5$ Hz and amplitude $A = 5$.

(a) Write the equation representing this pure tone.

(b) Draw a graph representing this pure tone.

(c) How long is one cycle?

(2) Consider a pure tone with frequency $f = 8$ Hz and amplitude $A = 2$.

(a) Write the equation representing this pure tone.

(b) Draw a graph representing this pure tone.

(c) How long is one cycle?

(3) Suppose three pure tones with frequencies 1000 Hz, 2000 Hz, and 4000 Hz are playing at the same time. Write the equation representing this sound.

(4) What is the amplitude and frequency of the pure tone given by the equation $s(t) = 40 \sin(880t)$?