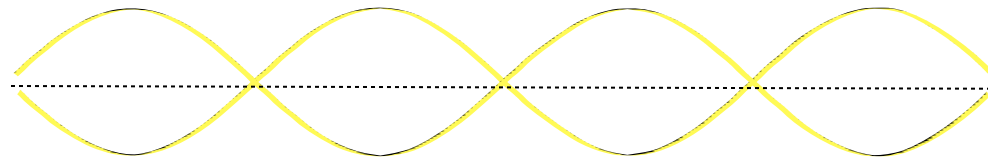


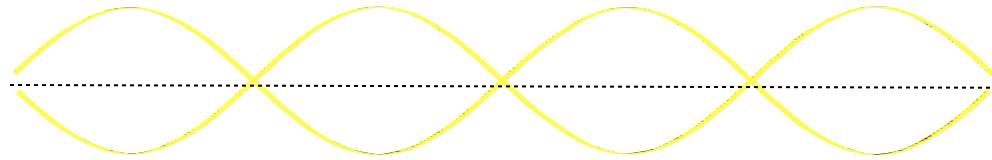
Say you shake a string at 200 Hz and it sets up the following resonance pattern (which we call the 4th harmonic):



What is the fundamental frequency of this string?

- a) 50 Hz
- b) 100 Hz
- c) 200 Hz
- d) 400 Hz
- e) 800 Hz

Consider the same string, that sets up the following pattern in response to a 200 Hz frequency.



Which of the following is NOT a resonant frequency of the string?

- a) 75 Hz
- b) 100 Hz
- c) 200 Hz
- d) 400 Hz
- e) 1050 Hz

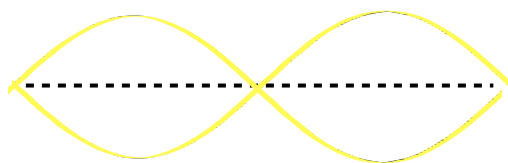
Consider the following two strings. The first is 1 ft long, and the second is 2 ft long. Both strings are of the same material and have the same tension.



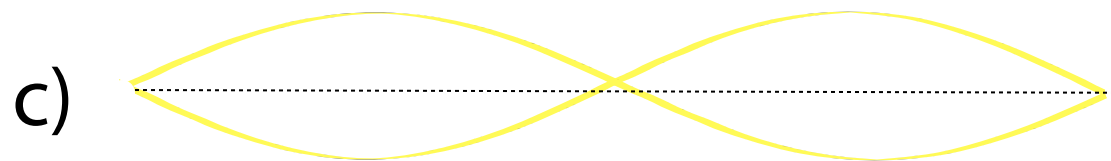
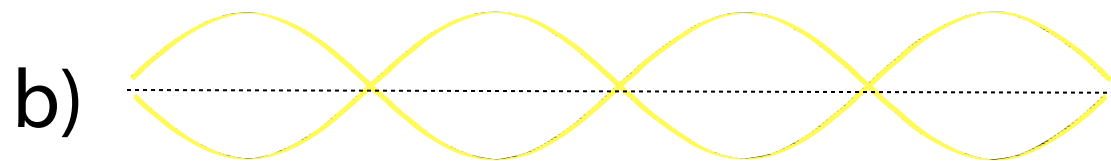
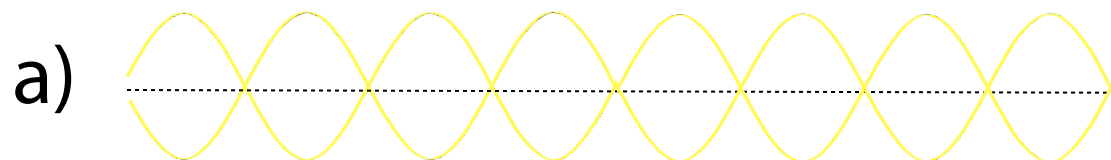
A certain frequency causes the first string to resonate. What will happen if we play the same frequency at the second string?

- a) It will also resonate
- b) It will not resonate
- c) It depends on which harmonic was excited on the first string

Say we play a 100 Hz frequency at a 1 ft string, and it sets up the following pattern:



Now we play that same frequency at a 2 ft string (of similar tension, material etc). What pattern will be set up?



d) No resonant pattern (i.e. jumbled mess)