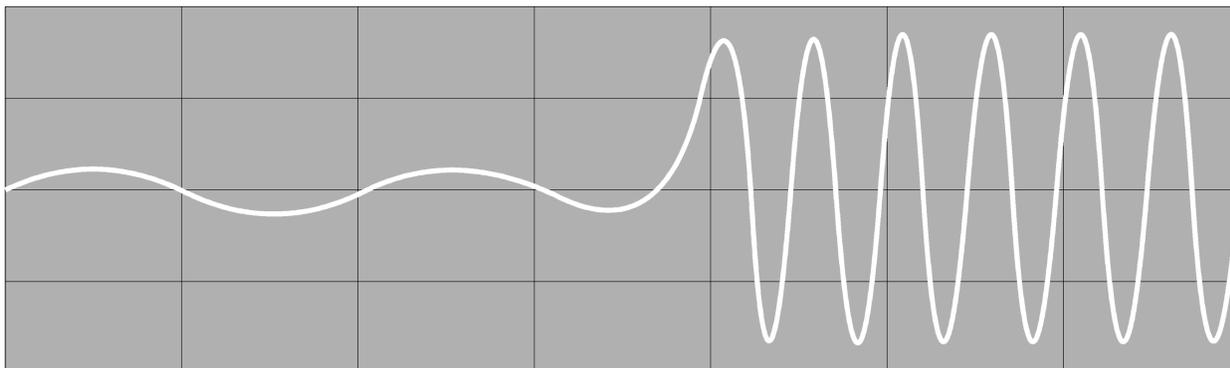
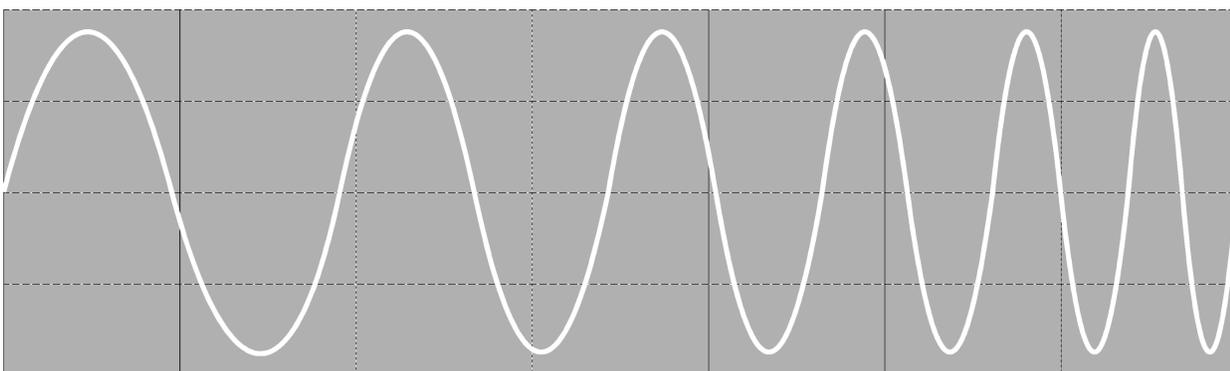


The patterns below correspond to oscilloscope readings taken over a period of time.



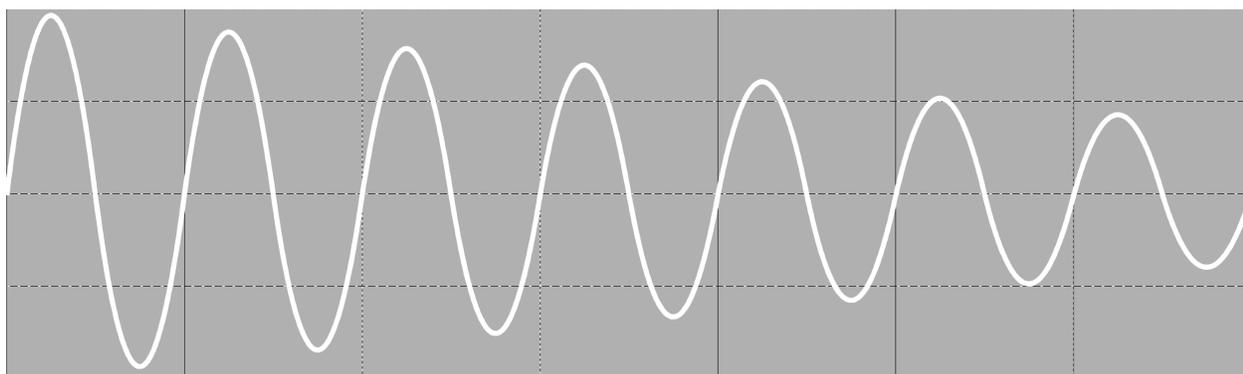
1. What kind of sound would produce the pattern (trace) shown above?

*A sound with low volume and low pitch changes to high volume and high pitch.*



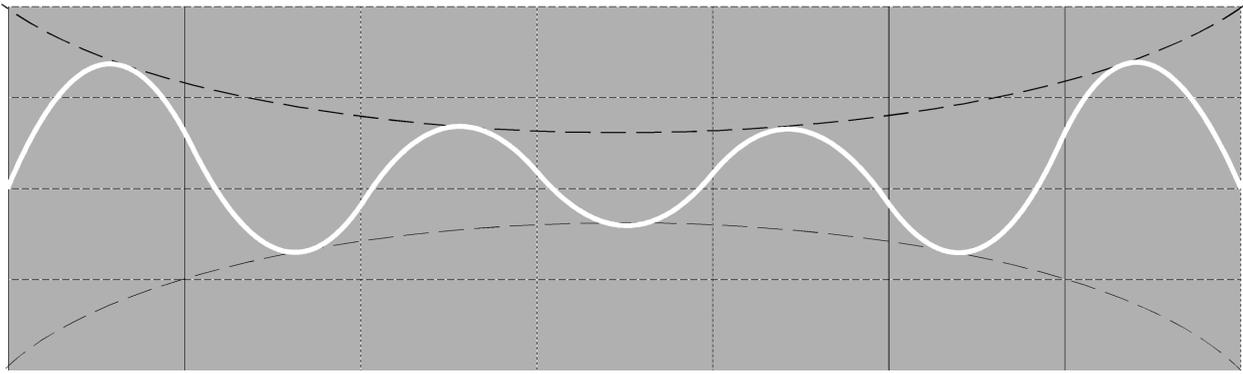
2. What kind of sound would produce the pattern (trace) shown above?

*A sound with constant volume but increasing pitch.*



3. What kind of sound would produce the pattern (trace) shown above?

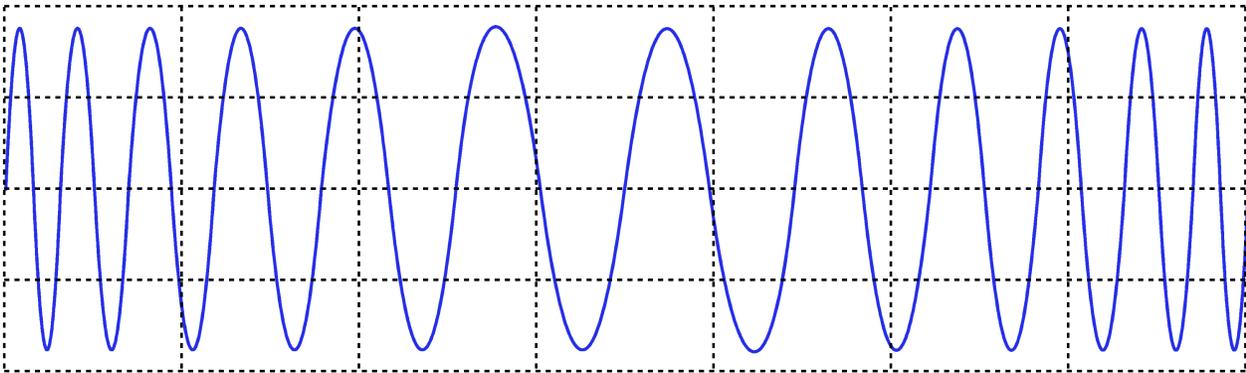
*A sound with constant pitch but decreasing volume.*



4. What kind of sound would produce the pattern (trace) shown above? (The dashed line represents the amplitude envelope and therefore shows the variation in volume.)

*A sound with constant pitch. Initially the volume decreases, then the volume increases.*

5. Consider the sound sequence made by your instructor (playing the organ pipe). Sketch the trace corresponding to the sound.



6. A car drives by with its horn blowing (such as the one shown in *Physics: Cinema Classics Waves I: Doppler Effect*). Sketch the pattern of the horn's sound as the car approaches, passes, and drives onward. Assume the car takes seven seconds to make its trip and it passes us at  $t = 3.5\text{s}$ .

