Analyzing Graphs of Sound Source Vibrations

**Exit Ticket:** The graphs to the right represent the position of a sound source that is vibrating. The sound source in each case is a xylophone that was struck with a mallet three different times to create the three different graphs.

1. Based on the three graphs, what can you claim about each instance that sound that was made by hitting a xylophone? Why do you think that?

2. Which of the graphs has the highest frequency? Which of the graphs has the lowest frequency? What is your mathematical evidence?