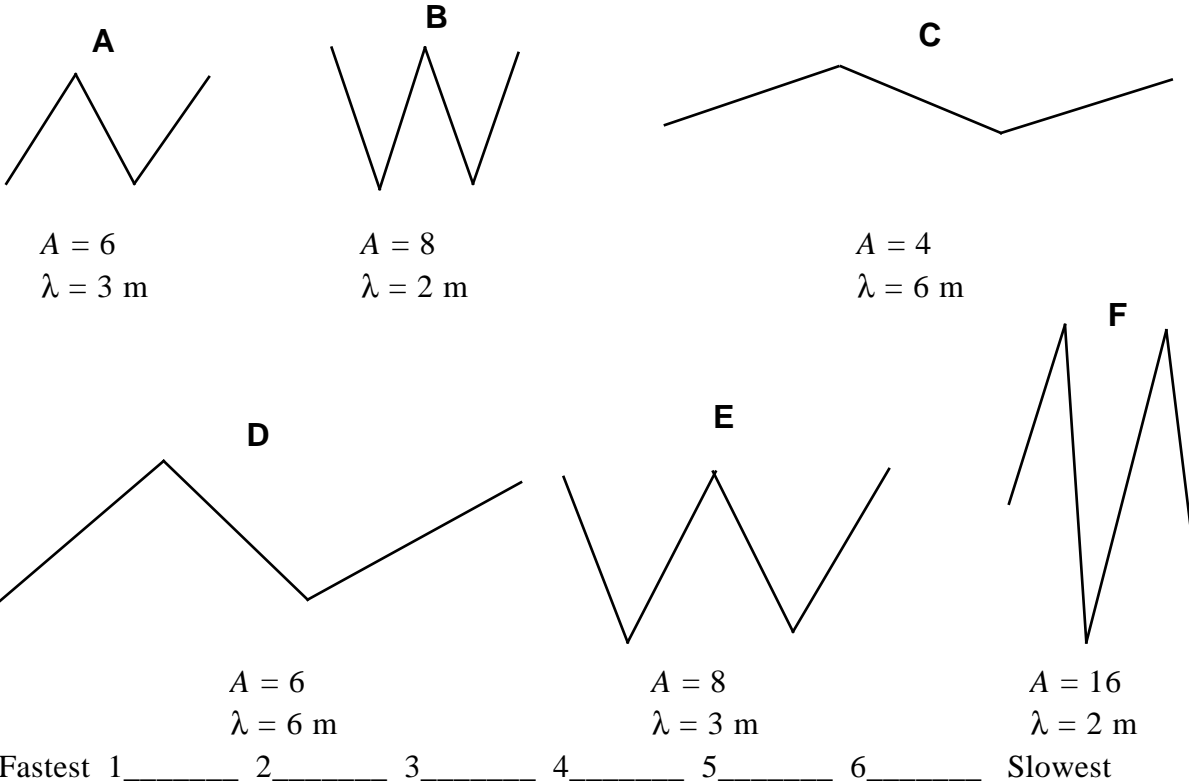


Wave Forms with Same Frequency—Wave Speed ¹¹⁹

Shown below are six waves, which are all the same kind of wave (e.g., all seismic waves) traveling in various media. The waves all have the same frequency, but their amplitudes, A , and wavelengths, λ , vary as shown in the figures. Specific values for these properties are given in each figure.

Rank these waves from greatest to least based on the speed of the waves. That is, put first the wave that is moving fastest and put last the wave that is moving slowest.



Or, all of these waves travel at the same speed. _____

Or, all of these waves are at rest. _____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed

Sure

Very Sure

1 2 3 4 5 6 7 8 9 10

¹¹⁹ D. Maloney