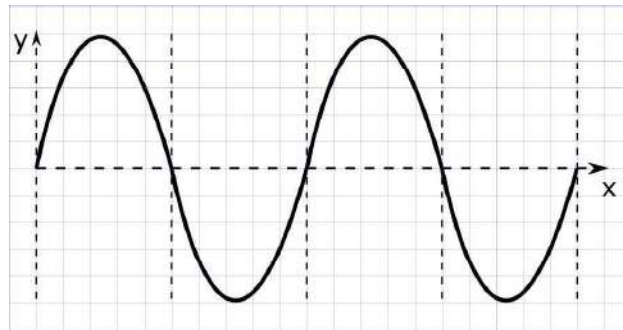


NAME \_\_\_\_\_ DATE \_\_\_\_\_

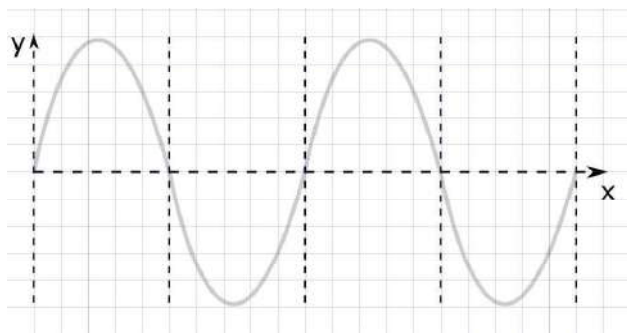
**Scenario**

Angela is shaking her hand left and right on a rope to get a continuous wave. A graph of a continuous wave is shown at right.

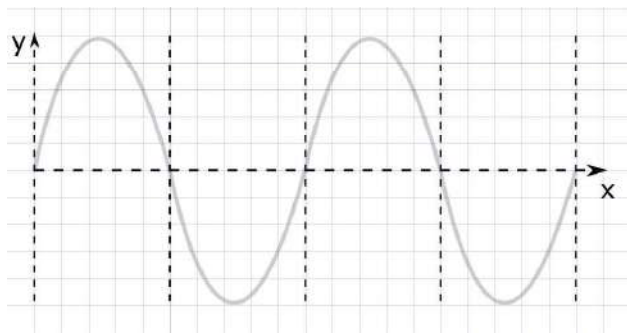
**Using Representations**

**PART A:** On the diagram, label a crest, a trough, an amplitude, and a wavelength.

**PART B:** On the diagram below, sketch a continuous wave with half the amplitude as Angela shaking her hand back and forth five times per second. The wavelength is 1 m. Calculate the speed of the wave. (Apply this to Parts C and D.)



**PART C:** On the diagram below, sketch a continuous wave with twice the wavelength.



**PART D:** Is Angela shaking the string at the same rate?

\_\_\_\_\_ Faster \_\_\_\_\_ Slower \_\_\_\_\_ Same rate to get the last continuous wave

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