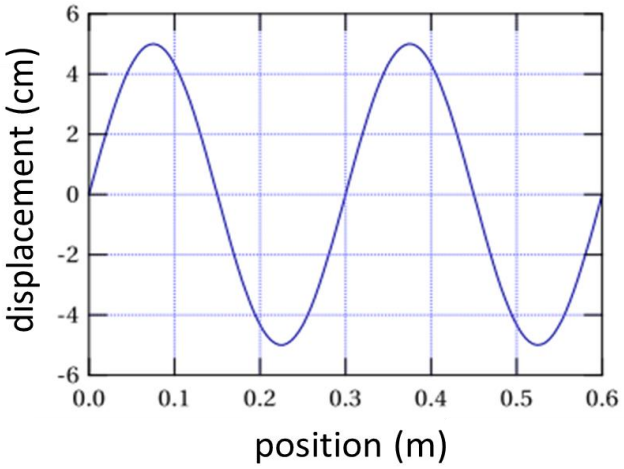
SCIENCE 2022/2023 **HOMEWORK #16**

NAME:

1. **<u>Review Slides 4-7</u> (that introduce wave parameters) of <u>Lecture #16</u>.**

2. **The graph below shows a *snapshot*** (similar to Slide 4) **of a wave travelling along a thin rope.** X-axis represents position along the rope; Y-axis shows displacement of the corresponding "fragment" of the rope (undisturbed rope would look like a straight line at Y=0).



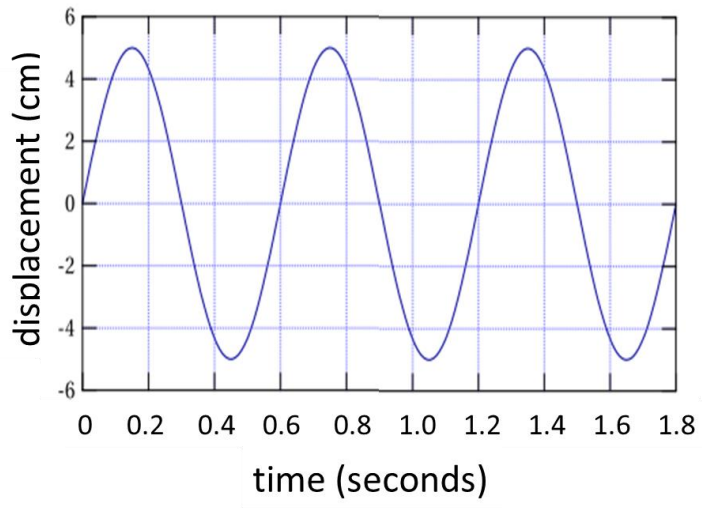
<u>Measure</u> the following wave parameters (pay attention to units!):

A. Amplitude=

B. Wavelength=

C. How many full waves (cycles) are shown?

3. **The second graph shows the same wave, but now in *time domain***
(tracking how a particular "fragment" vibrates in time, similar to Slide 6)**.**



<u>Measure:</u>

D. Period=

E. How many full waves (cycles) are shown?

<u>Calculate frequency</u> (see Slide 7):

F. Frequency=