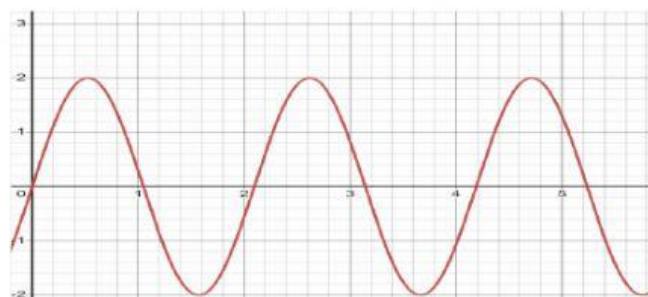


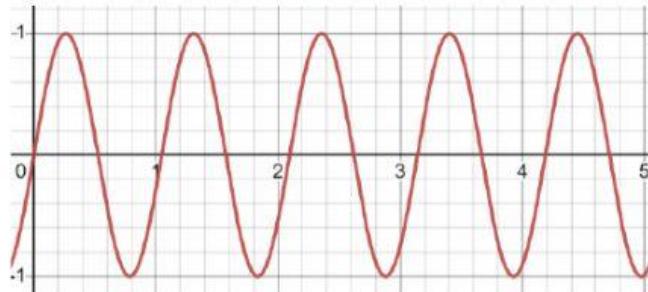
## Wave Properties and Graphs

- As the wavelength of a wave in a uniform medium increases, its **speed** will \_\_\_\_\_.
  - decrease
  - Increase
  - Remain the same
- As the wavelength of a wave in a uniform medium increases, its **frequency** will \_\_\_\_\_.
  - Decrease
  - Increase
  - Remain the same
- What is the **speed** of a wave that has a frequency of 200 Hz and a wavelength of 0.50 m? \_\_\_\_\_
- The period of a wave is 0.0300 seconds. It travels at a velocity of 10.0 m/s. Determine the frequency and the wavelength of the wave.
  - Frequency \_\_\_\_\_
  - Wavelength \_\_\_\_\_
- A wave having a wavelength of 4.0 meters and an amplitude of 2.5 meters travels a distance of 8.0 seconds. Determine the frequency and the period of the wave.
  - Frequency \_\_\_\_\_
  - Period \_\_\_\_\_
- Assuming the x and y-axis are in cm, what is the wavelength and amplitude of the wave pictured below?
  - Wavelength \_\_\_\_\_
  - Amplitude \_\_\_\_\_

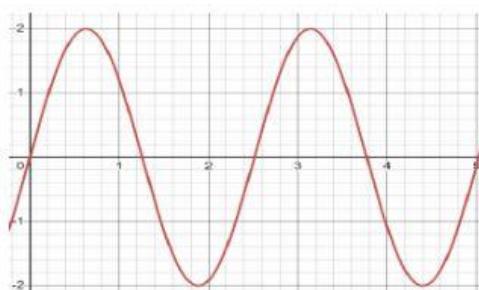


7. Assuming the y-axis is cm and the x-axis is s, what is the frequency, period, and wave speed of the wave pictured below?

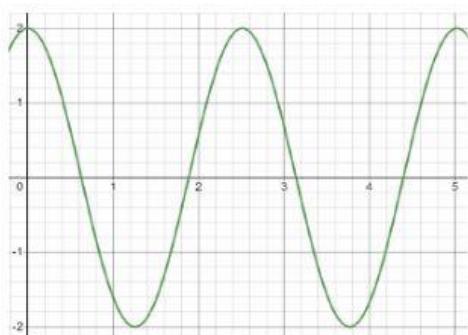
- Frequency \_\_\_\_\_
- Period \_\_\_\_\_
- Wave speed \_\_\_\_\_



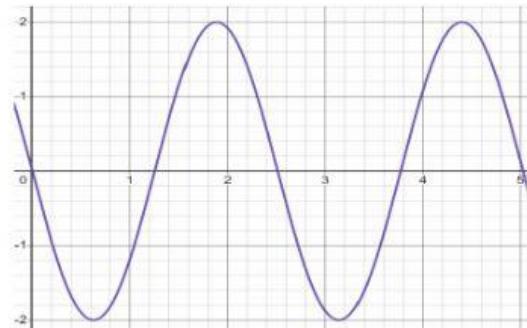
8. Identify the correct velocity graph that corresponds to the displacement-time graph pictured below



Displacement-time graph

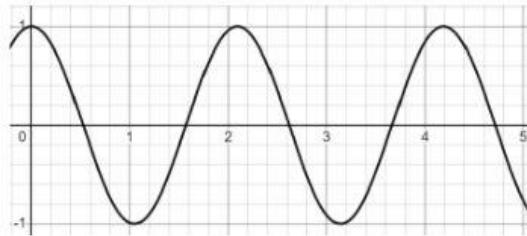


A.

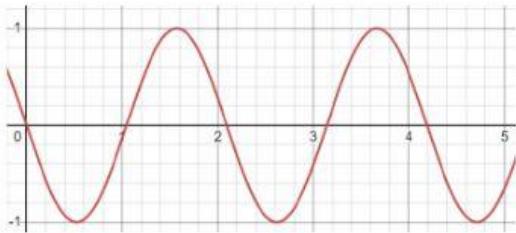


B.

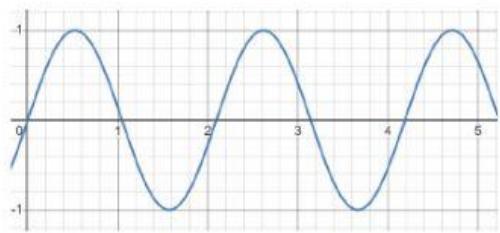
9. Identify the correct acceleration graph for the velocity graph pictured below



**Velocity graph**

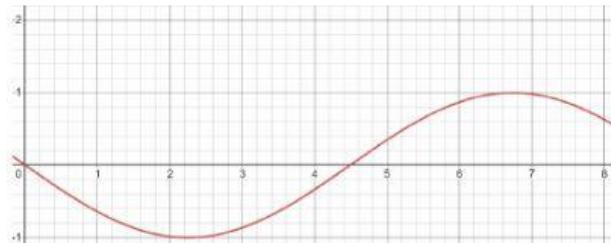


A.

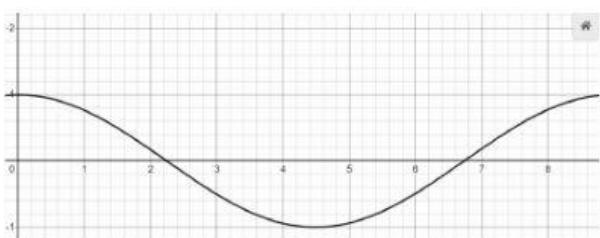


B.

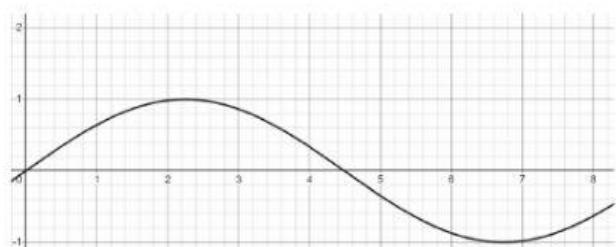
10. Identify the correct displacement-time graph for the acceleration graph pictured below



**Acceleration Graph**



A.



B.