Due Fri., Aug 31

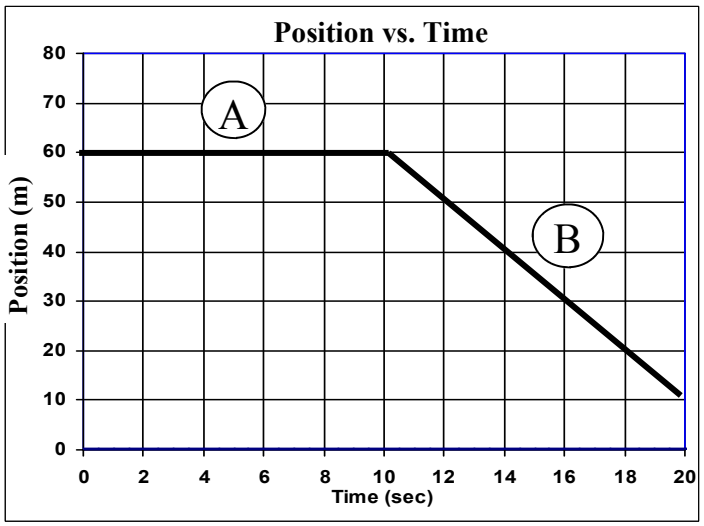
2012 PreAP Linear Motion 4

1. Convert the following:
   A. 2.8 weeks to minutes

   B. * 945×10^{-5} MHz to mHz (mega to milli):

   C. $1{,}506\times10^{4}$ cL to GL:

2. Which axis: vertical or horizontal?
   A. __ Is the dependent variable?
   B. __ Is the manipulated variable?
   C. ___Is the independent variable?
   D. ___Is the responsive variable?

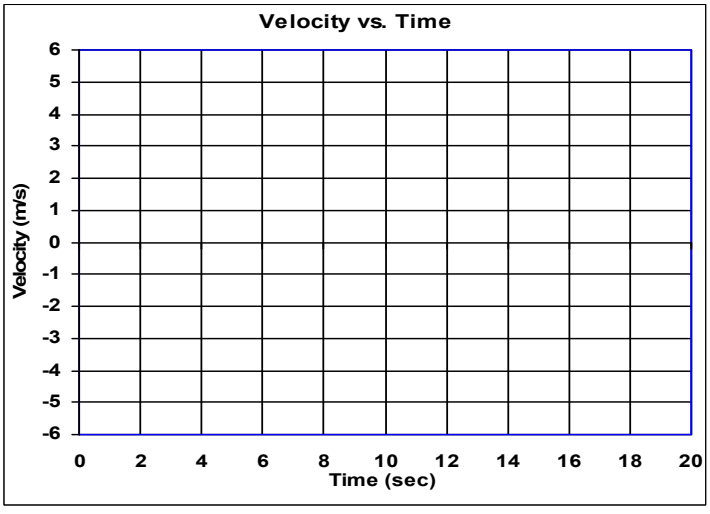


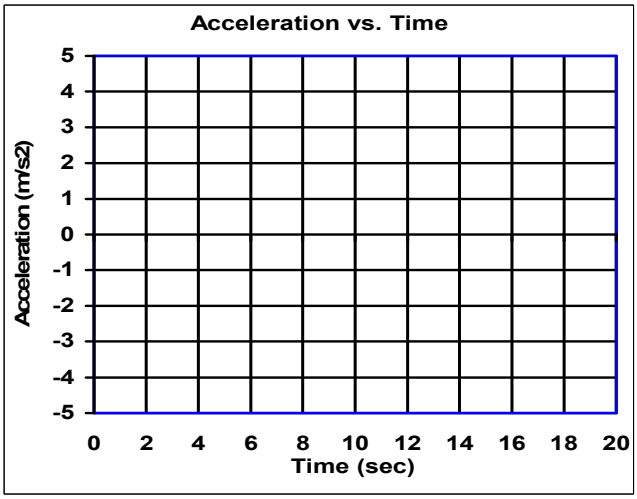
3. A. Find the slope of line segment A.

   B. * Find the slope of line segment B.

   C. Graph both of these line segments on the velocity graph below.

   D. Determine the acceleration of each line segment and graph them on the acceleration graph below.





Answers:

1B) Answer: 9.45×10^{6} mHz. If you didn't get the answer, try again. If you STILL don't get it, HOW to do the problem is at the bottom of this page. 3B: the slope is negative because the object is moving back toward the origin.

4. B. * 945×10^{-5} MHz to mHz (mega to milli):

$$9.45\times10^{-5}\,MHz\left(\frac{10^{3}\,mHz}{1\,Hz}\right)=9.45\times10^{-5+6+3}=9.45\times10^{4}\,mHz$$