**One-Dimensional Kinematics**

**Name and section number:**

**Partner’s name and section number:**

1. Type the kinematical equations for velocity and position in the x-direction for constant acceleration ax.

2. Copy and paste the measurements of displacement into this box: a) should be the x(t) plot and b) the vx(t) plot. Ensure that the displacement data and data boxes are readable.

a)

b)

3. Copy and paste the measurements of velocity into this box: a) should be the vx(t) plot and b) the x(t) plot. Ensure that the velocity data and data boxes are readable.

a)

b)

4. Copy and paste the measurements of acceleration into this box: a) should be the ax(t) plot, b) the vx(t) plot, and c) the x(t) plot. Ensure that the acceleration data and data boxes are readable.

a)

b)

c)

5. Summarize your results.

Δxa = Δxb =

va = vb =

aa = ab = ac =

*Each partner should do Question 6 individually; save two copies of this file under different names. Remember to change the order of your name and your partner’s name at the beginning of the file. Save the file again after typing in your answer and before you submit it for grading through myWPI. Email it to yourself so that you have a record of your work.*

6. In a few sentences in the box below, compare the sets of measurements for each of the three variables. Do they agree? Describe the graphical and mathematical relationships among them.