Name: _____

Group: _____ **Count-off:** _____

STAGGERED RACE 1 PART 1

Goal: Make a motion for Actor B so that Actor B starts at your group # and travels at the same velocity and duration as Actor A. **F2: View: Animation** (2nd QUIT [MODE] to Exit) to view the animation. **F4: Tools: Marks** to turn on Marks.

Don't forget to include units!

1. What is the velocity of Actor A? _____

2. Where does Actor A start? _____

3. What is the duration of Actor A? _____

4. Write a linear function to model Actor B's motion in slope-intercept form ($y = mx + b$):

   Function: _____ Domain: _____

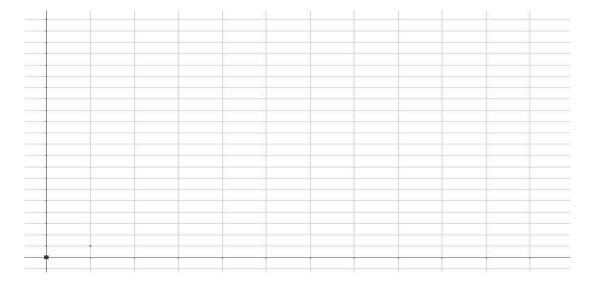Edit Actor B's function and domain in **F3: Edit: POS ▸ B ▸ FnEdit. F2: View: Animation** to verify Actor B starts at your group # and travels at the same velocity and duration as Actor A.

5. Describe the motion of your **group's** set of Actors. (Be sure to include starting positions, velocities, and durations. Include count-off #s when referring to Actors.)

Name: _____

Group: _____ **Count-off:** _____

6. Draw your prediction of your **group's** functions. Label the axes and include units. Label each function with count-off #s.

7. Describe the motion of the **class'** set of Actors. (Be sure to include starting positions, velocities, and durations. Include group and count-off #s when referring to Actors.)

Name: _____

Group: _____ **Count-off:** _____

8. Draw your prediction of the **class'** functions. Label the axes and include units. Label each function with group and count-off #s.

9. Suppose we use G for group # and C for count-off #. What is the general rule for this activity?

Function: _____ Domain: _____