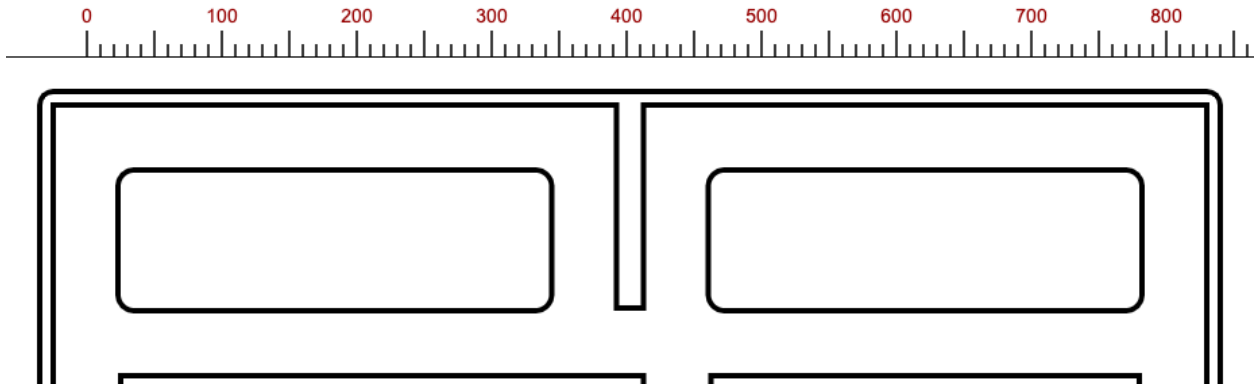


Time to Collision (Algebraic)

Step 1: Draw in the two objects in the proper spots and show their velocities.



Step 2: Write the linear equations that describe the motion of each of the objects.

Step 3: The equations are of the form $y = Ax + B$. Comparing the equations to the picture, what does the A value represent about the object? What does the B value represent about the object?

Step 4: Using your algebra skills, determine the x value that will make the y values of the two equations equal. This x value is the time until the objects collide. Show your work neatly below

Step 5: Plug your x value back into each equation to verify that you get the same y value for each. Box off that y value. This y value will be the location of the collision. Show your work and then enter the answers into the computer to see if you did everything correctly