**CBR Worksheet**

Follow the instructions to set up your CBR motion detector to record your movement.

Depending on which software you use you will either see a position/time graph of your motion or a graph and an animation.

You will need to walk a motion that interacts with Actor B’s motion in interesting ways. Actor B’s motion is modeled by the equation \( Y=2X \) for 6 seconds. In each of these activities write down what you are thinking when you construct the motions. What instructions do you give to your team members to help them walk a suitable motion? Don’t try and do these activities by trial and error.

**Activity 1:**
Construct a motion for Actor A that walks alongside Actor B for the duration of their walk.

**Activity 2:**
Construct a motion for Actor A that starts where Actor B finishes and finishes where Actor A starts

**Activity 3:**
Construct a motion for Actor A that starts where Actor B finishes but when they meet Actor A walks hand-in-hand with Actor B back to the start.

**Activity 4:**
Now construct a motion that crosses B to the right of the center (then left of the center).