## stage layout \& animation

The motion graphs describing these values start and end with the line at an angle appropriate to the Start and End values. As these values increase beyond 1 (which produces a straight 45 degree line) there is an increasingly large "kink" in the middle of the path as it tries to join the two ends of the path together, i.e. the steeper the beginning and end of the path, the bigger the "kink" in the middle. This translates into the actor taking larger backward movements to "wind itself up" to achieve the End velocity value.


Figure 7-83: Start=2, End=2


Figure 7-84: Start=4, End=4

- Velocity Scaling-Start/End negative values ~ Using negative values will cause the actor to move in the opposite direction at the specified velocity before moving forward in the desired direction. It will then "over-shoot" the final key frame position before returning to it, again at the chosen, albeit negative, velocity.
The graphs produced with negative values show the path starting or ending with the line at the angle appropriate to the velocity, but starting off in the opposite direction and ending up at the final point from the opposite direction. As the negative values increase, the distance the actor deviates from the start and end positions increases which also increases the velocity in the middle of the path because of the greater distance needed to be covered.


Figure 7-85: Start=-1, End=-1


Figure 7-86: Start=0, End=-1


Figure 7-87: Start=-1, End=0

