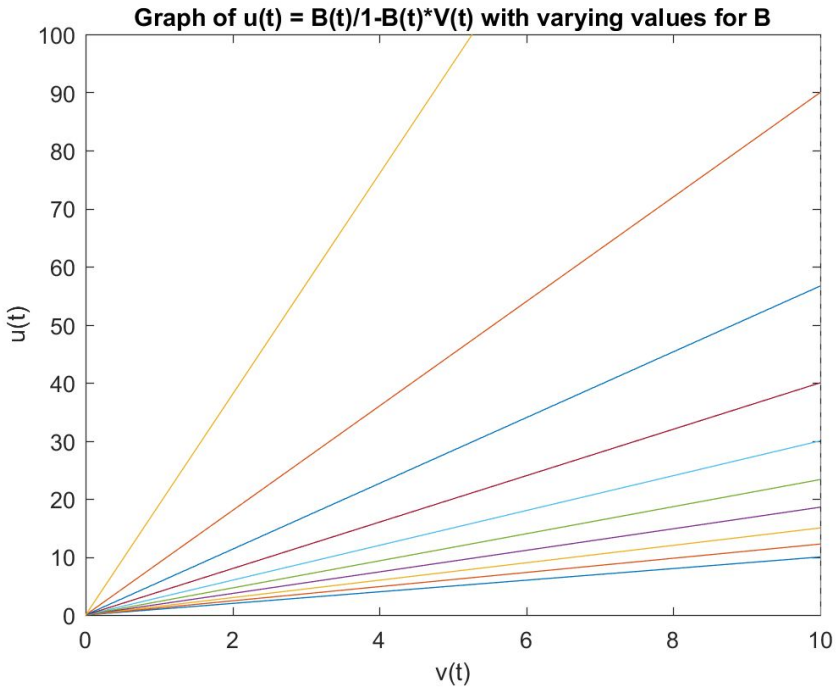
Michael Chan
Hw 3

1+2)

3)



What this shows is that in the equation

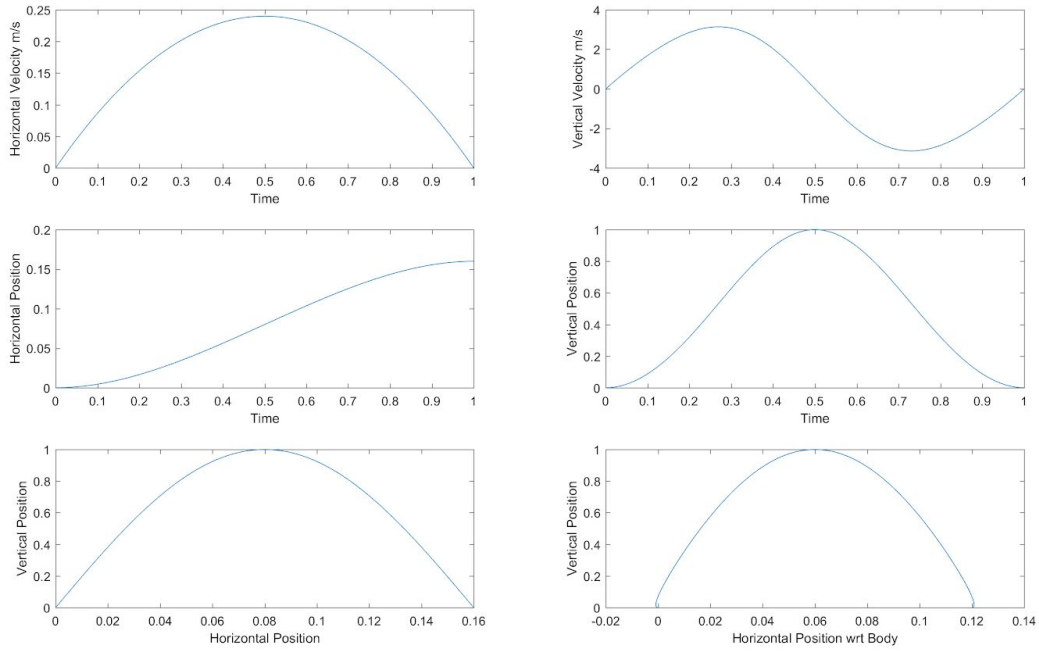
$$u(t) = \frac{B(t)}{1-B(t)} * V(t)$$

As beta increases, the value of u increases as well in a linear fashion. This is basically just an application of the equation

$$Y = Mx$$

Which just represents a linear relation between x and y with a slope of M. In this case, there is a linear relation between u and v with the slope of $\frac{B(t)}{1-B(t)}$. Obviously, when beta reaches 1, then the denominator of the m becomes infinity, resulting in a completely vertical line.

4)



See Matlab code for math.