Logistic Function

A Logistic function is modeled by the following derivative:

$$\frac{dP}{dt} = kP(1 - \frac{P}{m})$$

k represents the maximum rate of growth as a percentage. Therefore, kP will represent the absolute growth rate.

m represents the maximum population size. Therefore, $\frac{P}{m}$ will approach 1 and the derivative will approach 0 as we approach carrying capacity.