

Given $y' = ay + b$, a(n) linear differential equation of order one with constant coefficients, the equilibrium solution is $y = \underline{-b/a}$. The parameter a determines whether the Eq Sol'n is stable or not. If it is positive, the solution is unstable. If it is negative, the solution is stable. For an object in free fall subject to air resistance, the Eq Sol'n is stable/unstable (circle one) and is known as the terminal velocity. For the predator/prey model in chapter 1, the Eq Sol'n is stable/unstable (circle one).