Quiz 23

Name:

1. In class we developed the disease model

$$\frac{dI}{dt} = \alpha I(1-I) - \mu I.$$

(a) Explain what the variables and parameters mean in this equation.

(b) In the case where $\alpha>\mu,$ show (using the stability test) that the equilibrium $I^*=1-\frac{\mu}{\alpha}$ is stable.