

5.6 Handout

1. For the following descriptions, write down the system of DE and find the nullclines and equilibria.

(a) per capita growth of prey = $1 - 0.05p$, per capita growth of predators = $1 + 0.001b$

(b) per capita growth of prey = $2 - 0.0001p^2$, per capita growth of predators = $-1 + 0.01b$

2. Write down a system of DE for the disease model where people who recover become immune. Then find the nullclines and equilibria.