

5440

Homework 2

Andrew

Simon

AMS677

a)

Because this is cell free we don't have an intercellular dilution term because there are no cells,
 $\therefore M=0$.

$$\dot{M} = r_{X,i} U_i - \underbrace{(M + \theta_{M,i})}_{\theta} M_i + \lambda_i$$

$$\dot{M} = r_{X,i} U_i - \theta_{M,i} M_i + \lambda_i$$

$$\dot{P}_i = r_{L,i} W_i - \underbrace{(M + \theta_{P,i})}_{\theta} P_i$$

$$\dot{P}_i = r_{L,i} W_i - \theta_{P,i} P_i$$