

### Sample Problem: Chapter 5

#### Movement of L and K

Suppose Home uses only capital and labor for production of two goods, computers and shoes. There are total 100 workers and 100 units of capital in the economy. Computers use 2 units of capital for each worker, so that  $K_c = 2 * L_c$ , whereas shoes use 0.5 unit of capital for each worker, so that  $K_s = 0.5 * L_s$ .

- a) (10 points) Solve for the amount of L and K used in each industry.
- b) (10 points) Suppose there is an inflow of 25 workers in the economy due to immigration, keeping total capital constant at 100. Solve for the amount of L and K used in each industry.
- c) (10 points) Suppose instead there is an inflow of 25 units of capital in the economy due to FDI, keeping total labor constant at 100. Solve for the amount of L and K used in each industry.