## 310-2 - Yossi Spiegel

## Solution to Problem set 2

## Problem 1

(a) If n firms decide to enter then the symmetric NE is such that each firm produces $\mathrm{A} /(\mathrm{n}+2)$ units.
(b) The profit of each entrant is $\pi^{*}=(\mathrm{A} /(\mathrm{n}+2))^{2}$-F. Entry will take place until $\pi^{*}=0$. Hence the number of entrants is $\mathrm{A} / \mathrm{F}^{1 / 2}-2$.
(c) As F increases there are fewer entrants. This is intuitive since the more entrants, the less profit each entrant makes. So to make entry profitable, fewer entrants can come in.

