Additional question for Chapter 18

Competitive equilibrium with production

Question 5)

We assume that $u(c, l) = \log c + \log l$, $h = 24$, $f(k, n_d) = k^\alpha n_d^{1-\alpha}$, $z = k = 1$, $\alpha = \frac{1}{2}$ and $G = 2$.

Characterize the competitive equilibrium. Find P and c, l and firm profits.