## Dynamic Optimization - Homework $6\,$

Christian Segercrantz 481056 February 9, 2022 6.6

$$J(n,m) = \begin{cases} 0, & n < y_i \land m < x_i \forall i \\ \max_i \{u_i + J(n - y_i, m)\}, & m \le x_i \\ \max_i \{u_i + J(n, m - x_i)\}, & n \le y_i \\ \max_i \{u_i + J(n, m - x_i) + J(n, x_i)\} \\ \max_i \{u_i + J(n - y_i, m) + J(y_i, m)\} \end{cases}, \text{ else}$$

$$(1)$$