

Q 1.9.25

(a)

$$\min_{x \in \mathbb{R}^2} 300x_1 + 500x_2$$

s.t.

$$\begin{cases} x_k = f_d(x_{k-1}, u_{k-1}, \theta) + q_{k-1} \\ y_k = h(x_k, \theta, k) + r_k \end{cases} \quad \begin{matrix} (1a) \\ (1b) \end{matrix}$$

(b)