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The trick to approaching this problem is to realize that the workers modeled via inventory-type balance constraints. Note also that **3 sneakers can be made per hour**.

Input parameters. Let

$$\begin{aligned} T &= \text{set of months} = \{1,2,3,4,5,6\} \\ I_0 &= \text{initial inventory} = 1000 \\ K_0 &= \text{initial number of workers} = 15 \\ d_i &= \text{demand in period } i \qquad \text{for } i \in T \end{aligned}$$

Decision variables. Let

$$\begin{aligned} S_i &= \text{number of sneakers produced during month } i && \text{for } i \in T \\ I_i &= \text{number of sneakers stored at the end of month } i && \text{for } i \in T \\ H_i &= \text{number of workers hired in month } i && \text{for } i \in T \\ F_i &= \text{number of workers fired in month } i && \text{for } i \in T \\ W_i &= \text{number of workers working in month } i && \text{for } i \in T \\ K_i &= \text{number of workers kept at the end of month } i && \text{for } i \in T \\ O_i &= \text{number of overtime hours in month } i && \text{for } i \in T \end{aligned}$$

Objective function and constraints.

$$\begin{aligned} \min \quad & \sum_{i \in T} \left(5I_i + 3000W_i + 2000H_i + 3000F_i + 75O_i\right) && && \text{(cost)} \\ \text{s.t.} \quad & 0 \le S_i \le 3 \cdot 200W_i + 3O_i && \text{for } i \in T && \text{(labor/overtime)} \\ & 0 \le O_i \le 40W_i && \text{for } i \in T && \text{(overtime limit)} \\ & W_i = K_{i-1} + H_i && \text{for } i \in T && \text{(workers available)} \\ & K_{i-1} + H_i = K_i + F_i && \text{for } i \in T && \text{(workers hired/fired/kept balance)} \\ & 0 \le I_i \le 3000 && \text{for } i \in T && \text{(inventory limit)} \\ & I_{i-1} + S_i = I_i + d_i && \text{for } i \in T && \text{(inventory/demand balance)} \\ & S_i, I_i, H_i, F_i, W_i, K_i, O_i \ge 0 && \text{for } i \in T \end{aligned}$$