\( n_i \) = shipment frequency of product i \\
\( (i = 1, 2, \ldots, N) \)

\[ n^* = \max (n_1, n_2, \ldots, n_N) \]

In the present example, \( n^* = n_2 \) (Laptops)

\[ m_i = \frac{s_i n^*}{n_i} \] (frequency of most frequently shipped item)

\[ m_i \geq 1 \] (\( i = 1, 2, \ldots, N \))

How do we determine \( m_i \) (\( i = 1, 2, \ldots, N \)) (See next lecture)

Once we determine \( m_i \)

Shipment cost \( S^* = S + \sum_{i=1}^{N} \frac{s_i}{m_i} \)
\[(n^*)_{\text{opt}} = \sqrt{\frac{\sum_{i=1}^{N} D_i h_i c_i}{2 S^*}}\]

Shipping frequency (of the most frequently shipped item) that minimizes cost

\[n_i = \frac{n^*}{m_i} \quad (\leq n^*)\]

Optimal lot size for each product

\[(q_i^*) = \frac{1}{n_i} \quad i = 1, 2, \ldots, N\]