8.1 The system can be represented by one predicate and one event. The conditions “summer”, “spring”, “autumn” and “winter” are combined into a predicate “season”, with possible values *summer*, *autumn*, *winter*, *spring*. We mark the predicate initially with *spring* according to the case in the C/E-net. Additionally, we define a function \( \text{next}(x) \):

\[
\begin{align*}
\text{next}(\text{spring}) &= \text{summer} \\
\text{next}(\text{summer}) &= \text{autumn} \\
\text{next}(\text{autumn}) &= \text{winter} \\
\text{next}(\text{winter}) &= \text{spring}
\end{align*}
\]

Then, the following P/E-net represents the four seasons system.

8.2 a) The property can be expressed as an implication “Predicate *package waiting for acknowledgement* contains a token \((d_i, d_j)\)”→“Predicate *processing receivers* contains a token \(d_j\)”. The definition 8.4(b)(iii) provides a direct transformation of the property formula to a fact. The resulting fact is:

b) We can proceed similarly as in a). The property can be formulated as an implication, and transformed to a fact by definition 8.4(b)(iii). The resulting fact is: