

```

Define  $\overline{aS}_i = \text{If} [ \$k == 0, \mathbb{E}_{\{i\} \rightarrow \{i\}} [-a_i \alpha_i - x_i \mathcal{P}_i \xi_i],$ 
  Append  $\overline{aS}_{\{i\}, \$k-1},$ 
  - Last  $[\text{PadRight} [\overline{aS}_{\{i\}, 0}, \$k + 1] // aS_i //$ 
    PadRight  $[\overline{aS}_{\{i\}, \$k-1}, \$k + 1]] ]$ 
]]

```