

Define $\left[am_{i,j \rightarrow k} = \mathbb{E}_{\{i,j\} \rightarrow \{k\}} \left[(\alpha_i + \alpha_j) a_k, (e^{-\gamma \alpha_j} \xi_i + \xi_j) x_k, \mathbf{1} \right] \right]_{\$k}$,

$bm_{i,j \rightarrow k} = \mathbb{E}_{\{i,j\} \rightarrow \{k\}} \left[(\beta_i + \beta_j) b_k, (\eta_i + \eta_j) y_k, e^{(e^{-\epsilon \beta_i} - 1) \eta_j} y_k \right]_{\$k}$