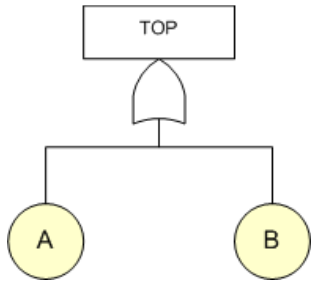
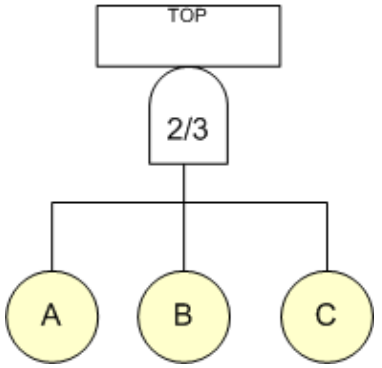
Solution to Hands-On Problems (1)

- Find the structure importance I_A of component A for the following system fault tree models



States for remaining components	Critical state for A
($\overline{B}$) B not failed	YES
(B) B failed	NO

$$I_A = \frac{\textbf{number of critical states}}{\textbf{total number of states for other components}} = \frac{1}{2} = 0.5$$



States for remaining components	Critical state for A
($\overline{B}$, $\overline{C}$) B & C not failed	NO
($\overline{B}$, C) B not failed, C failed	YES
(B, $\overline{C}$) B failed & C not failed	YES
(B, C) B & C failed	NO

$$I_A = \frac{\textbf{number of critical states}}{\textbf{total number of states for other components}} = \frac{2}{4} = 0.5$$