Quiz #5 Solution

$S' \rightarrow S\$$

$S \rightarrow E$

$E \rightarrow TM$

$M \rightarrow \varepsilon \mid +TM$

$T \rightarrow x$

closure $(S' \rightarrow .S\$) = \{S' \rightarrow .S\$,\ S \rightarrow .E,\ E \rightarrow .TM,\ T \rightarrow .x\} = I_0$.

Goto $(I_0, S) = \{$ closure $(S' \rightarrow S.\$)\} = \{S' \rightarrow S.\$\} = I_1$

Goto $(I_0, E) = \{$ closure $(S \rightarrow E.)\} = \{S \rightarrow E.\} = I_2$

Goto $(I_0, T) = \{$ closure $(E \rightarrow T.M)\} = \{E \rightarrow T.M,\ M \rightarrow .\varepsilon,\ M \rightarrow .+TM\} = I_3$

Goto $(I_0, x) = \{$ closure $(T \rightarrow x.)\} = \{T \rightarrow x.\} = I_4$

Goto $(I_3, M) = \{$ closure $(E \rightarrow TM.)\} = \{E \rightarrow TM.\} = I_5$

Goto $(I_3, +) = \{$ closure $(M \rightarrow +.TM)\} = \{M \rightarrow +.TM,\ T \rightarrow .x\} = I_6$

Goto $(I_6, T) = \{$ closure $(M \rightarrow +T.M)\} = \{M \rightarrow +T.M\} = I_7$.

Goto $(I_6, x) = \{$ closure $(T \rightarrow x.)\} = \{T \rightarrow x.\} = I_4$

Goto $(I_7, M) = \{$ closure $(M \rightarrow +TM.)\} =$