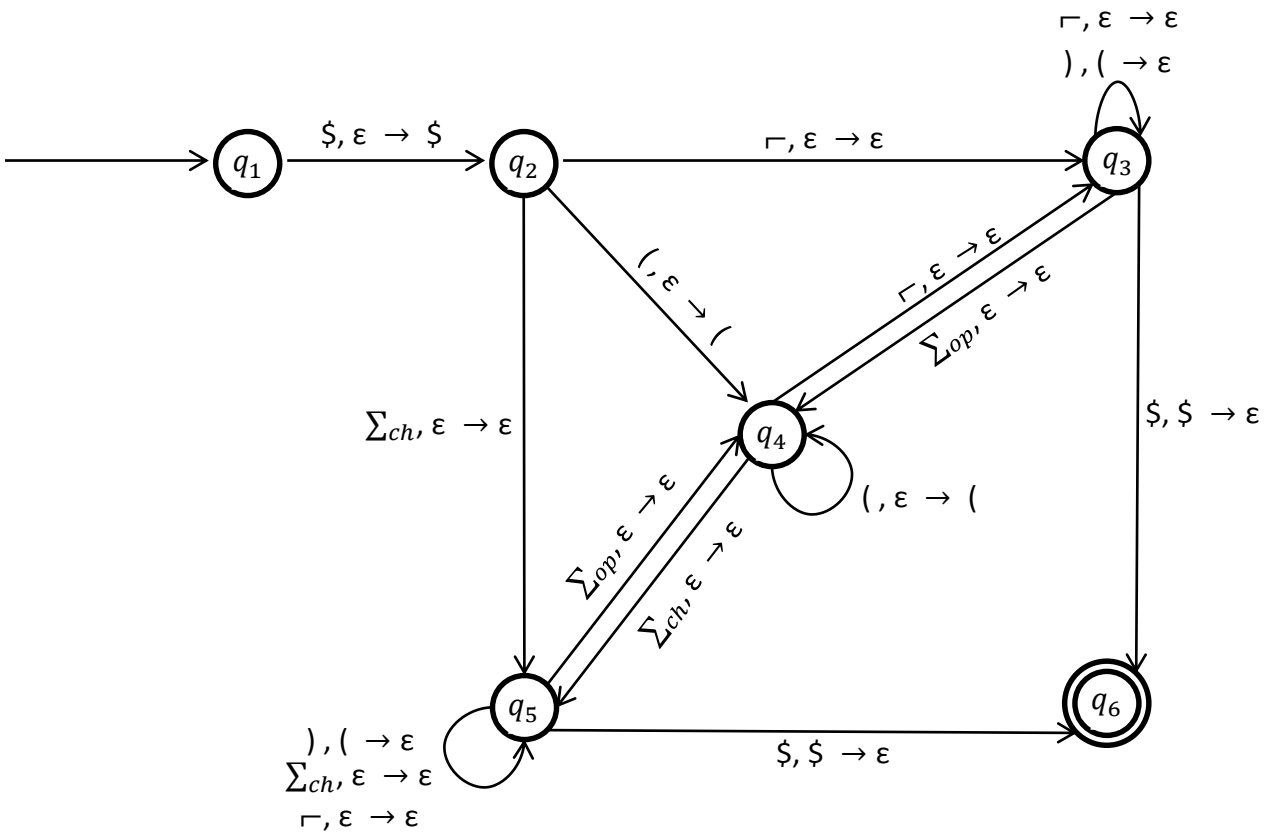
⌐={0,1,2,....9}

$\sum_{ch}$= $\sum$−(⌐ ∪ {+,−,∗,/, (,), $}) ; ($i.e. \sum_{ch} = \{a, b, c, \ldots., x, y, z, A, B, C, \ldots., X, Y, Z, _\}$)

$\sum_{op}$=$\sum$ − ($\sum_{ch}$∪ ⌐ ∪ {(,), $} ; ($i.e. \sum_{op}$={+,−,∗,/})



$PDA\ M = (Q, \sum, \Gamma, \delta, q_1, F)$

$Q = \{q_1, q_2, q_3, q_4, q_5, q_6\}$

Σ={a,b,c,...,z,A,B,C,...,Z,0,1,2,...,9,+,-,*,/,(,),$,_}

Γ={ $,(}

δ : Shown in diagram above.

$-q_1\ is\ start\ state.$

$F = \{q_6\}$