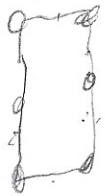

6 possible edges

upper bound 2^8

$2^4 \times 3$ (only horizontal edge)

+2 (the two valid 3 horizontal edge states)

Further limited by start states

$\approx$ 45 states possible

except for first move,
possible moves are $\frac{1}{3}(45)$
(based on ending
position of previous move)

16 possible board constraints
$\{-,1,2,3\} \times \{-,1,2,3\}$

Q_e = Edge Transitions

Q_c = Constraint Transitions

Q_{ec} = valid Edge transition for given Constraint