

1. Given an NFA described by the 5-tuple $(Q, \Sigma, \delta, q_0, F)$, what is the range of the transition function δ ?

(3 points)

1. Q

2. Σ

✓ 3. $P(Q)$

4. $Q \times \Sigma$

5. F

2. For an NFA, how many transitions (edges) may exist for a given state (node) when reading a particular input symbol from the language's alphabet?

(3 points)

1. Exactly one
2. None
3. More than one
- ✓ 4. Any of the above

3. Which of the following expressions is equivalent to A^+ ?

(3 points)

1. $A > A^*$

2. $A + A^*$

3. A^{**}

✓ 4. $A^{\circ}A^*$

5. $A \neg A^*$