

REG

- Closure, Thoda
- Rabin & Scott
- NFA-recognized
- DFA-recognized
- Right-linear grammars
- Left-linear grammars
- Buchi
- WMSO-recognizable

minimization, uniqueness

Closed under $\cup, \cap, *, h, h^{-1}, \epsilon$ -transitions

Ultimatively periodic length

index of Nerode congruence

not captured by pumping lemma

not regular by pumping lemma

$P(\Sigma^*)$

$$\exists x \exists y: Q_a(x) \wedge Q_b(y) \wedge xzy$$

$$\wedge \forall z: xzz \wedge zzy \rightarrow Q_c(z)$$

yields $\{a, b, c\}^* a^* b^* \{a, b, c\}^*$