

## \*\* Closure Properties of Language

Property	Regular	CEI	DCEI	CSL	Recursive	RE
Union	yes	yes	NO	yes	yes	yes
** Intersection	yes	NO	NO	yes	yes	yes
set Difference	yes	NO	NO	yes	yes	NO
** Complementation	yes	NO	yes	yes	yes	NO
Intersection with RL	yes	yes	yes	yes	yes	yes
Concatination	yes	yes	NO	yes	yes	yes
Kleene closure	yes	yes	NO	yes	yes	yes
Kleene plus	yes	yes	NO	yes	yes	yes
Reversal	yes	yes	NO	yes	yes	yes
Homomorphism	yes	yes	NO	NO	NO yes	yes
$\epsilon$ -free Homomorphism	yes	yes	NO	yes	yes	yes
Inverse Homomorphism	yes	yes	yes	yes	yes	yes
Substitution	yes	yes	NO	NO	NO	yes
$\epsilon$ -free Substitution	yes	yes	NO	yes	yes	yes