

## Finite Automata and Regular Expressions (3.2)

Comment: Restriction on REs.

- From RE to Automaton

We show, given a regular expression  $R$ , that there exists an  $\epsilon$ -NFA with

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whose language is \_\_\_\_\_.

- From Automaton to RE

We show, given a DFA  $D$ , that there exists a regular expression whose language is

\_\_\_\_\_.

- Conclusion

**Theorem.** Given a language  $L$ , the following are equivalent

- 1.
- 2.

Languages that meet any of the equivalent criteria in the above theorem are called

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