

## 0/6 Questions Answered

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## Week 4 Monday Review Quiz

Student Name

Search students by name or email...

### Q1 Pumping lemma

2 Points

Select all and only the statements that are (informally) equivalent to the pumping lemma.

☐ Every regular language has a pumping length.

☐ Every nonregular language does not have a pumping length.

☐ If  $L$  has a pumping length, then  $L$  is regular.

☐ If  $L$  does not have a pumping length, then  $L$  is nonregular.

Save Answer

## Q2 Applying pumping lemma

4 Points

In a proof that a language is nonregular using the pumping lemma, which of the following variables represent witnesses whose value we (as the provers) define? (Select all and only that apply)

☐ The positive integer  $p$

☐ The string  $s$

☐ The string  $x$

☐ The string  $y$

☐ The string  $z$

☐ The nonnegative integer  $i$

Save Answer

**Q3 Nonregular sets****4 Points**

Select and only the languages below that are nonregular.

☐  $\{0^n 1^n \mid n \geq 0\}$

☐  $\{0^n 1^m \mid n, m \geq 0\}$

☐  $\{0^n 1^m \mid 0 \leq n \leq m\}$

☐  $\{0^n 1^m \mid 0 \leq m \leq n\}$

☐  $\{0^n 1^m 0^n \mid n, m \geq 0\}$

[Save Answer](#)

**Q4 Extended Feedback****0 Points**

Any feedback about this week's material or comments you'd like to share? (Optional; not for credit)

**Q4.1 What's working?****0 Points**

What are you, as a student, doing that is helping your learning?

What are we, as course staff, doing that is helping your learning?

[Save Answer](#)

**Q4.2 What can be improved?****0 Points**

What can you, as a student, change or start doing to improve your learning?

What can we, as course staff, change or start doing to improve your learning?

Additional information you would like to share with the instructor?

[Save Answer](#)**Q4.3 Course material****0 Points**

Describe the single most confusing concept for you this quarter so far.

Describe the single most interesting concept for you this quarter so far.

[Save Answer](#)[Save All Answers](#)[Submit & View Submission >](#)

