

[Dashboard](#) / [My courses](#) / [MA-224-G 25H](#) / [Tests](#) / [Test 1 \(topics 1-3: Introduction, Concepts, Induction, Recursion, Grammars\)](#)**Status** Finished**Started** Thursday, 11 September 2025, 12:00 PM**Completed** Thursday, 11 September 2025, 12:16 PM**Duration** 16 mins 13 secs**Marks** 0.00/3.00**Grade** 0.00 out of 3.00 (0.03%)

Information

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This page contains all the problems for this test. The very last problem asks you to contact the person in charge of the exam and tell him or her the 4-digit key given in the problem text. In return you will be given a 5-digit signing code which you must give as the answer to the problem.

This problem does not count towards the final score, but **tests missing this code will not count towards the final grade.**

The following rules apply:

- Total time allowed: 30 minutes. The test will automatically close if time runs out.
- UiA's usual rules in regards to cheating on exams apply.

Question 1

Incorrect

Mark 0.00 out of 1.00

Consider the set

$$S = \{\{4\}, \{4, 9\}, \{9\}, \{\{4\}\}, \{\{9\}\}\}.$$

Mark all true statements.

- ☒ $\{\{9\}\} \subseteq S$
- ☐ $4 \in S$
- ☒ $\{\{4\}\} \subseteq S$
- ☐ $\{4\} \in S$
- ☐ $9 \subseteq S$
- ☒ $\{9\} \subseteq S$
- ☐ $\{9\} \in S$
- ☐ $9 \in S$
- ☐ $4 \subseteq S$
- ☒ $\{4\} \subseteq S$
- ☐ None of the above

Question 2

Incorrect

Mark 0.00 out of 1.00

Compute the least common multiple (lcm) and the greatest common divisor (gcd) of the numbers 384 and 648.

lcm :

gcd :

Question 3

Incorrect

Mark 0.00 out of 1.00

Consider the grammar

$(\{a, b, c\}, \{S, A, B, C\}, S, \{(S, A), (S, AB), (S, AC), (S, B), (A, Aa), (A, a), (B, bB), (C, c), (C, cC)\})$.

Select all the strings that can be generated by this grammar.

- ☐ acc
- ☐ bc
- ☐ aaab
- ☐ c
- ☐ ab
- ☐ abbbcc
- ☐ bb
- ☐ a
- ☐ abba
- ☐ abcccc
- ☒ None of the above

Question 4

Correct

Mark 0.00 out of 0.00

Signing code

Before closing the test you must answer this problem with a signing code given to you by the person in charge of the test.

Tests missing this signing code will be ignored and will not count towards the final score.

Key: 286

Signing code:

Your last answer was interpreted as follows:

15762

[◀ Technical test](#)