

[Dashboard](#) / [My courses](#) / [MA-224-G 24H](#) / [Tests](#) / [Test 1 \(topics 1-3: Introduction, Concepts, Induction, Recursion, Grammars\)](#)

Started on	Wednesday, 11 September 2024, 2:32 PM
State	Finished
Completed on	Wednesday, 11 September 2024, 2:51 PM
Time taken	19 mins 27 secs
Marks	0.79/3.00
Grade	0.79 out of 3.00 (26.41%)

Information

Information

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**

Partially correct

Mark 0.63 out of 1.00

Fill in the following truth table.

p	q	r	$p \vee (q \Rightarrow (p \wedge r))$
False	False	False	<input type="text" value="False"/>
False	False	True	<input type="text" value="True"/>
False	True	False	<input type="text" value="False"/>
False	True	True	<input type="text" value="False"/>
True	False	False	<input type="text" value="False"/>
True	False	True	<input type="text" value="True"/>
True	True	False	<input type="text" value="False"/>
True	True	True	<input type="text" value="True"/>

Question 2

Partially correct

Mark 0.17 out of 1.00

Translate the following numbers into the other bases and provide the intermediate division results (in base 10).

$2361_{10} =$ ₈ with
 $2361_{10} =$ ₂₃ with
 $11310_5 =$ ₁₂ with

Example:

$1234_{10} = 86A_{12}$ with [1234, 102, 8, 0]

Your last answer was interpreted as follows:

4471

Your last answer was interpreted as follows:

[295, 36, 4, 0]

Your last answer was interpreted as follows:

MAE

Your last answer was interpreted as follows:

[102, 4, 0]

Your last answer was interpreted as follows:

66C

Your last answer was interpreted as follows:

[942, 78, 6, 0]

Question 3

Incorrect

Mark 0.00 out of 1.00

Consider the following EBNF grammar.

$$H \rightarrow P \mid H . H$$
$$P \rightarrow Z \mid Z : P$$
$$Z \rightarrow n \mid h \mid i \mid z \mid y \mid p \mid \epsilon$$

Find a derivation for the following string: $i . h . z : y$.

The derivation is given as a sequence of strings.

Your last answer was interpreted as follows:

[PH, ZZ, nhizyp]

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: 433

Signing code:

Your last answer was interpreted as follows:

51364

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