Started on	Wednesday, 11 September 2024, 1:45 PM
State	Finished
Completed on	Wednesday, 11 September 2024, 1:59 PM
Time taken	14 mins
Marks	2.00/3.00
Grade	**2.00** out of 3.00 (**66.67**%)

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 0.50 out of 1.00

We use the notation $\{x \cdot n | n \in \mathbb{N}\}$ for all natural multiples of x.

Compute the following sets.

$\{3 \cdot n | n \in \mathbb{N}\} \cup \{12 \cdot n | n \in \mathbb{N}\}$ = { 3 $\cdot n | n \in \mathbb{N}\}$

Your last answer was interpreted as follows:

$$3$$

$\{14 \cdot n | n \in \mathbb{N}\} \cup \{2 \cdot n | n \in \mathbb{N}\}$ = { 2 $\cdot n | n \in \mathbb{N}\}$

Your last answer was interpreted as follows:

$$2$$

$\{4 \cdot n | n \in \mathbb{N}\} \cap \{20 \cdot n | n \in \mathbb{N}\}$ = { 5 $\cdot n | n \in \mathbb{N}\}$

Your last answer was interpreted as follows:

$$5$$

$\{60 \cdot n | n \in \mathbb{N}\} \cap \{55 \cdot n | n \in \mathbb{N}\}$ = { 3300 $\cdot n | n \in \mathbb{N}\}$

Your last answer was interpreted as follows:

$$3300$$

Question **2**

Partially correct

Mark 0.50 out of 1.00

Complete the following division computations.

dividend	**/**	**divisor**	**=**	**quotient**	**(**	**remainder**	**)**
1959	/	170	=	11 Your last answer was interpreted as follows: 11	(	89 Your last answer was interpreted as follows: 89	)
-1671	/	129	=	-12 Your last answer was interpreted as follows: -12	(	-123 Your last answer was interpreted as follows: -123	)
1594 Your last answer was interpreted as follows: 1594	/	183	=	8	(	130	)
2093	/	123 Your last answer was interpreted as follows: 123	=	17	(	2	)

Question **3**

Correct

Mark 1.00 out of 1.00

Consider the following EBNF grammar.
M → K | x M [x]
W → d | W e d | ε
H → F | F j H | ε
F → d | F c d | ε
K → m | m m m

Check the ambiguity of the grammar.

The grammar is ambiguous with the start symbol M:	True
The grammar is ambiguous with the start symbol W:	False
The grammar is ambiguous with the start symbol H:	True
The grammar is ambiguous with the start symbol F:	False
The grammar is ambiguous with the start symbol K:	False

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: 454

Signing code: 27794

Your last answer was interpreted as follows:

27794

◄ Technical test

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