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Status	Finished
Started	Thursday, 11 September 2025, 12:00 PM
Completed	Thursday, 11 September 2025, 12:28 PM
Duration	28 mins 23 secs
Marks	1.42/3.00
Grade	1.42 out of 3.00 (47.25%)

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

Correct

Mark 1.00 out of 1.00

Consider the set

$$S = \{4, 7, \{4\}, \{4, 7\}, \{7\}, \{\{4\}\}, \{\{7\}\}\}.$$

Mark all true statements.

- ☒ $\{7\} \subseteq S$
- ☐ $4 \subseteq S$
- ☒ $\{4\} \subseteq S$
- ☒ $\{7\} \in S$
- ☒ $4 \in S$
- ☒ $\{\{7\}\} \subseteq S$
- ☒ $\{\{4\}\} \subseteq S$
- ☐ $7 \subseteq S$
- ☒ $7 \in S$
- ☒ $\{4\} \in S$
- ☐ None of the above

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).

$1792_{10} =$ ₉ with

$1792_{10} =$ ₃₀ with

$271_{20} =$ ₃ with

Example:

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

Your last answer was interpreted as follows:

2411

Your last answer was interpreted as follows:

[1792, 334, 10, 1, 0]

Your last answer was interpreted as follows:

Your last answer was interpreted as follows:

Question **3**

Partially correct

Mark 0.25 out of 1.00

Consider the following operators with precedence and associativity, where higher precedence is computed before lower priority.

The operations are "+" for addition, "-" for subtraction, "*" for multiplication, and "/" for integer division.

operator	precedence	associativity
-	4	left to right
/	3	left to right
*	2	left to right
+	1	right to left

Calculate the following expressions. If the expression cannot be calculated, write **und**, which is the STACK symbol for "undefined"

$$12 + 1 - 1 - 1 = 11$$

Your last answer was interpreted as follows:

11

$$15 + 4 * 2 + 13 = 285$$

Your last answer was interpreted as follows:

285

$$15 * 4/4/4 * 2 = 15/8$$

Your last answer was interpreted as follows:

$\frac{15}{8}$

$$1 + 12/15 + 4 + 2 - 13 = -260/21$$

Your last answer was interpreted as follows:

$-\frac{260}{21}$

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: 399

Signing code: 56016

Your last answer was interpreted as follows:

56016

◀ Technical test

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