OpenGeoProver Output for conjecture "geothm_zadatak"

Wu's method used

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1 Invoking the theorem prover

The used proving method is Wu's method.
The input system is:

$$\begin{aligned} p_1 &= 2x_1 - \\ p_2 &= x_2 + x_1 \\ p_3 &= x_3 - x_1 \end{aligned}$$

1.1 Triangulation, step 1

Choosing variable: Trying the variable with index 3.

Variable x_3 selected: The number of polynomials with this variable, with indexes from 1 to 3, is 1.

Single polynomial with chosen variable: Chosen polynomial is p_3. No reduction needed.

The triangular system has not been changed.

1.2 Triangulation, step 2

Choosing variable: Trying the variable with index 2.

Variable x_2 selected: The number of polynomials with this variable, with indexes from 1 to 2, is 1.

Single polynomial with chosen variable: Chosen polynomial is p_2. No reduction needed.

The triangular system has not been changed.

1.3 Triangulation, step 3

Choosing variable: Trying the variable with index 1.

Variable x_1 selected: The number of polynomials with this variable, with indexes from 1 to 1, is 1.

Single polynomial with chosen variable: Chosen polynomial is p_1. No reduction needed.

The triangular system has not been changed.

The triangular system is:

$$\begin{aligned} p_1 &= 2x_1 - \\ p_2 &= x_2 + x_1 \\ p_3 &= x_3 - x_1 \end{aligned}$$

2 Final Remainder

2.1 Final remainder for conjecture geothm_zadatak

Calculating final remainder of the conclusion:

$$g = x_3 + x_2$$

with respect to the triangular system.

1. Pseudo remainder with p_3 over variable x_3:

$$g = x_2 + x_1$$

2. Pseudo remainder with p_2 over variable x_2:

$$g = 0$$

3. Pseudo remainder with p_1 over variable x_1:

$$g = 0$$

3 Prover results

Status: Theorem has been proved.

Space Complexity: The biggest polynomial obtained during prover execution contains 2 terms.

Time Complexity: Time spent by the prover is 0.013 seconds.

4 NDG Conditions

NDG Conditions in readable form

- There are no NDG conditions for this theorem