

A kérdésre a válasz igenlő, az $1, 2, \dots, 15$ halmaz ugyanis felbontható a kívánt módon 5 darab háromtagú számtani sorozatra:

- A) 1 8 15 differencia 7
- B) 4 9 14 differencia 5
- C) 2 6 10 differencia 4
- D) 3 5 7 differencia 2
- E) 11 12 13 differencia 1



Ezek a számtani sorozatok páronként diszjunktak, és a differenciájuk különböző. Ezzel állításunkat beláttuk.

Szabó Csaba (Budapest, Fazekas M. Gyak. Gimn., III. o. t.)

A diagram illustrating the partitioning of the set $\{1, 2, \dots, 15\}$ into five disjoint arithmetic progressions (A, B, C, D, E) and their corresponding musical notation.

The top row shows the sequence of elements: A, C, D, B, D, C, D, A, B, C, E, E, E, B, A, corresponding to positions 1 through 15.

The middle row shows the sequence of patterns used for each element, corresponding to the five arithmetic progressions: A (grid), C (vertical lines), D (stippled), B (diagonal cross-hatch), D (stippled), C (vertical lines), D (stippled), A (grid), B (diagonal cross-hatch), C (vertical lines), E (empty), E (empty), E (empty), B (diagonal cross-hatch), A (grid).

The bottom row shows the musical notation for each element, corresponding to the five arithmetic progressions: A (bottom line), B (second line), C (third line), D (fourth line), E (top line).