Monochromatic Arithmetic Forests

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Definition 1. If A = $\{a_1 < a_2 < \cdots < a_n\} \subseteq \mathbb{N}$, where $\mathbb{N}$ is the set of positive integers, we say that the

(The same remarks concerning x y apply to all of the following results.)

One can prove a similar variation of van der Waerden's theorem:

Theorem W*. For all r 1 and k 1, there exists w^*

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