

Clones containing the polynomial functions on groups of order pq

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P. M. Idziak has conjectured that each cyclic group of squarefree order has only finitely many polynomially inequivalent expansions. Furthermore, he conjectured that the clone of polynomial functions on every such expansion \mathbf{V} is uniquely determined by the congruences of \mathbf{V} and their commutators.

We show that both assertions are true for each cyclic group whose order is the product of 2 distinct primes. In this case, the polynomial functions on an expansion \mathbf{V} can be obtained by techniques that are already described in the literature except if \mathbf{V} is nilpotent and non-abelian. We solve this remaining case by using module theory. This is joint work with E. Aichinger.

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