

# Groups with small element orders

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We consider groups with given set of element orders to see when they are locally finite. In particular, the presentation contains recent results (joint with E. Jabara, D. Lytkina, V. Mazurov) on groups whose element orders are at most 6. We prove that such groups are either locally finite, or have exponent 5. A question whether a group of exponent 5 is locally finite, is still open.

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