



## **DIVISIBILITY RULES AND DIGITS REPEATING**

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### **Abstract**

Simple rules for checking divisibility that avoid division are known for 2, 3, 5, 7 and 11. Are there any more? Yes, they exist for all primes, in fact, for all positive integers  $n$  (Sections 2-4), in all bases.

**Keywords and phrases:** divisibility rule, repeating digits, period length, block property, magic rectangle, group of rotations, quadratic residue, class number.

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