

Divisibility Test

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It can be shown, that this particular kinds of divisibility tests can be checked by looking at the remainder of b^k modulo n :

- **Kind 1** — $b^k \equiv 0 \pmod{n}$.
- **Kind 2** — $b^k \equiv 1 \pmod{n}$.
- **Kind 3** — $b^k \equiv -1 \pmod{n}$.

So, all it takes to solve this problem is to compute b^k modulo n for increasing k and stop at the first one that reaches remainder of 0, 1, or -1 . Report that there is no answer if the computation loops without reaching any of the required remainders.