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to be the sum of ϕ applied to all of the divisors of n (including 1 and n).

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$$a^k \pmod{7} :$$

		$\leftarrow k \rightarrow$					
		1	2	3	4	5	6
a	1	1	1	1	1	1	1
	2	2	4	1	2	4	1
	3	3	2	6	4	5	1
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Define: The **order** of $a \pmod{p}$, written $|a|$ or $|a|_p$, is the smallest positive integer k such that $a^k \equiv 1 \pmod{p}$.

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You try: Compute $\psi_p(k)$ for $1 \leq k \leq p - 1$ for $p = 3, 5$, and 7 .

