*PRIME* = "On input $p$:

1. If $p$ is even, *accept* if $p = 2$; otherwise, *reject*.
2. Select $a_1, \ldots, a_k$ randomly in $\mathcal{Z}_p^+$.
3. For each $i$ from 1 to $k$:
4. Compute $a_i^{p-1}$ mod $p$ and *reject* if different from 1.
5. Let $p - 1 = st$ where $s$ is odd and $t = 2^h$ is a power of 2.
6. Compute the sequence $a_i^{s \cdot 2^0}, a_i^{s \cdot 2^1}, a_i^{s \cdot 2^2}, \ldots, a_i^{s \cdot 2^h}$ modulo $p$.
7. If some element of this sequence is not 1, find the last element that is not 1 and *reject* if that element is not $-1$.
8. All tests have passed at this point, so *accept*."

Source: Introduction to the Theory of Computation

by Michael Sipser