7169 is a product of two distinct primes p and q, and $\varphi(7169) = 6996$. Find p and q.

You don't have to simplify numerical answers, but anybody with a calculator and zero knowledge of mathematics should be able to simplify it for you. For example, it's okay to say something like " $p = \frac{7169 - 4(271 - 2 \cdot 432)}{58}$ ", but it's not okay to say "p is the smallest positive divisor of 7169".