Comparative cost and preferred method

Scanning a length-m decimal string takes $\Theta(m)$ character operations and constant state storage; each input symbol must in general be inspected. Parsing the entire integer creates a potentially $\Theta(m)$-digit arithmetic object with unnecessary bit cost. The structural finite-state comparison avoids that object, but it is also a standard lexer method. No complex-analytic method improves the regular-expression construction.