

a derivation proving that 3.14159 is a "legal" Algol number:

<number> => <unsigned number>
=> <decimal number>
=> <unsigned integer><decimal fraction>
=> <digit> <decimal fraction>
=> 3 <decimal fraction>
=> 3.<unsigned integer>
=> 3.<unsigned integer><digit>
=> 3.<unsigned integer>9
=> 3.<unsigned integer><digit>9
=> 3.<unsigned integer>59
=> 3.<unsigned integer><digit>59
=> 3.<unsigned integer>159
=> 3.<unsigned integer><digit>159
=> 3.<unsigned integer>4159
=> 3.<digit>4159
=> 3.14159