

Default options

This is test output of the `ionumbers` L^AT_EX package. The default L^AT_EX output, the output with `ionumbers` package and the expected output with `ionumbers` package is given for different inputs.

If the package `ionumbers` works correctly, the contents in the ‘`ionumbers`’ columns and the respective contents in the ‘expected’ columns must be identical.

input	L ^A T _E X	ionumbers	expected
simple digits			
\$1\$	1	1	1
\$12\$	12	12	12
\$123\$	123	123	123
\$1234\$	1234	1234	1234
\$12345\$	12345	12345	12345
\$123456\$	123456	123456	123456
\$1234567\$	1234567	1234567	1234567
point			
\$.1\$	.1	.1	.1
\$1. \$	1.	1.	1.
\$1.1\$	1.1	1.1	1.1
\$1. .2\$	1.2	1.2	1.2
\$1. .2\$	1.2	1.2	1.2
\$1.23456\$	1.23456	1.23456	1.23456
\$12345.6\$	12345.6	12345.6	12345.6
\$1.23.456\$	1.23.456	1.23.456	1.23.456
\$a.b\$	<i>a</i> . <i>b</i>	<i>a</i> . <i>b</i>	<i>a</i> . <i>b</i>
\$a.1\$	<i>a</i> .1	<i>a</i> .1	<i>a</i> .1
\$1.a\$	1. <i>a</i>	1. <i>a</i>	1. <i>a</i>
comma			
\$,1\$	,1	,1	,1
\$1,\$	1,	1,	1,
\$1,1\$	1,1	1,1	1,1
\$1, .2\$	1,2	1,2	1,2
\$1, .2\$	1,2	1,2	1,2
\$1,23456\$	1,23456	1,23456	1,23456
\$12345,6\$	12345,6	12345,6	12345,6
\$1,23,456\$	1,23,456	1,23,456	1,23,456
\$a,b\$	<i>a</i> , <i>b</i>	<i>a</i> , <i>b</i>	<i>a</i> , <i>b</i>
\$a,1\$	<i>a</i> ,1	<i>a</i> ,1	<i>a</i> ,1
\$1,a\$	1, <i>a</i>	1, <i>a</i>	1, <i>a</i>

input	L ^A T _E X	ionumbers	expected
plus and minus			
\$+1\$	+1	+1	+1
\$-1\$	-1	-1	-1
\$++1\$	++1	++1	++1
\$+ +1\$	++1	++1	++1
\$+ + 1\$	++1	++1	++1
\$1+2\$	1+2	1+2	1+2
\$1+ 2\$	1+2	1+2	1+2
\$1 +2\$	1+2	1+2	1+2
\$1++2\$	1++2	1++2	1++2
\$x+1\$	$x+1$	$x+1$	$x+1$
\$1+x\$	$1+x$	$1+x$	$1+x$
\$x+y\$	$x+y$	$x+y$	$x+y$
letter ‘e’			
\$1e1234\$	$1e1234$	$1e1234$	$1e1234$
\$1e+1234\$	$1e+1234$	$1e+1234$	$1e+1234$
\$1e. \$	$1e.$	$1e.$	$1e.$
\$1e, \$	$1e,$	$1e,$	$1e,$
\$1e.1234\$	$1e.1234$	$1e.1234$	$1e.1234$
\$1e,1234\$	$1e,1234$	$1e,1234$	$1e,1234$
\$1e++1234\$	$1e++1234$	$1e++1234$	$1e++1234$
\$1e 1234\$	$1e1234$	$1e1234$	$1e1234$
\$1e +1234\$	$1e+1234$	$1e+1234$	$1e+1234$
\$1 e1234\$	$1el234$	$1el234$	$1el234$
mixed numbers			
\$1.234,890\$	1.234,890	1.234,890	1.234,890
\$1,234.890\$	1,234.890	1,234.890	1,234.890
\$1234e5678\$	$1234e5678$	$1234e5678$	$1234e5678$
\$+1234e5678\$	$+1234e5678$	$+1234e5678$	$+1234e5678$
\$1234e+5678\$	$1234e+5678$	$1234e+5678$	$1234e+5678$
\$1.234e5.678\$	$1.234e5.678$	$1.234e5.678$	$1.234e5.678$
\$1,234e5,678\$	$1,234e5,678$	$1,234e5,678$	$1,234e5,678$
single characters			
\$\sqrt{1}\$	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$
\$\sqrt{1234}\$	$\sqrt{1234}$	$\sqrt{1234}$	$\sqrt{1234}$
\$\sqrt{+}\$	$\sqrt{+}$	$\sqrt{+}$	$\sqrt{+}$
\$\sqrt{++}\$	$\sqrt{++}$	$\sqrt{++}$	$\sqrt{++}$
\$\sqrt{+1234}\$	$\sqrt{+1234}$	$\sqrt{+1234}$	$\sqrt{+1234}$
\$1e\sqrt{+1234}\$	$1e\sqrt{+1234}$	$1e\sqrt{+1234}$	$1e\sqrt{+1234}$
\$1\sqrt{+1234e0}\$	$1\sqrt{+1234e0}$	$1\sqrt{+1234e0}$	$1\sqrt{+1234e0}$

Options `autothousands=true`, `autothousandths=true`

This is test output of the `ionumbers` L^AT_EX package. The default L^AT_EX output, the output with `ionumbers` package and the expected output with `ionumbers` package is given for different inputs.

If the package `ionumbers` works correctly, the contents in the ‘`ionumbers`’ columns and the respective contents in the ‘expected’ columns must be identical.

input	L ^A T _E X	ionumbers	expected
simple digits			
\$1\$	1	1	1
\$12\$	12	12	12
\$123\$	123	123	123
\$1234\$	1234	1, 234	1, 234
\$12345\$	12345	12, 345	12, 345
\$123456\$	123456	123, 456	123, 456
\$1234567\$	1234567	1, 234, 567	1, 234, 567
point			
\$.1\$	.1	.1	.1
\$1 . \$	1.	1.	1.
\$1 . 1\$	1.1	1.1	1.1
\$1. . 2\$	1.2	1.2	1.2
\$1 . 2\$	1.2	1.2	1.2
\$1.23456\$	1.23456	1.234 56	1.234 56
\$12345.6\$	12345.6	12, 345.6	12, 345.6
\$1.23.456\$	1.23.456	1.23.4 56	1.23.4 56
\$a.b\$	<i>a</i> . <i>b</i>	<i>a</i> . <i>b</i>	<i>a</i> . <i>b</i>
\$a.1\$	<i>a</i> .1	<i>a</i> .1	<i>a</i> .1
\$1.a\$	1. <i>a</i>	1. <i>a</i>	1. <i>a</i>
comma			
\$,1\$	,1	,1	,1
\$1 , \$	1,	1,	1,
\$1,1\$	1,1	1,1	1,1
\$1, . 2\$	1,2	1,2	1,2
\$1 , 2\$	1,2	1,2	1,2
\$1 , 23456\$	1, 23456	1, 23456	1, 23456
\$12345,6\$	12345,6	12345,6	12345,6
\$1,23,456\$	1, 23, 456	1, 23, 456	1, 23, 456
\$a,b\$	<i>a</i> , <i>b</i>	<i>a</i> , <i>b</i>	<i>a</i> , <i>b</i>
\$a,1\$	<i>a</i> ,1	<i>a</i> ,1	<i>a</i> ,1
\$1,a\$	1, <i>a</i>	1, <i>a</i>	1, <i>a</i>

input	L ^A T _E X	ionumbers	expected
plus and minus			
\$+1\$	+1	+1	+1
\$-1\$	-1	-1	-1
\$++1\$	++1	++1	++1
\$+ +1\$	++1	++1	++1
\$+ + 1\$	++1	++1	++1
\$1+2\$	1+2	1+2	1+2
\$1+ 2\$	1+2	1+2	1+2
\$1 +2\$	1+2	1+2	1+2
\$1++2\$	1++2	1++2	1++2
\$x+1\$	$x+1$	$x+1$	$x+1$
\$1+x\$	$1+x$	$1+x$	$1+x$
\$x+y\$	$x+y$	$x+y$	$x+y$
letter ‘e’			
\$1e1234\$	$1e1234$	$1e1,234$	$1e1,234$
\$1e+1234\$	$1e + 1234$	$1e + 1,234$	$1e + 1,234$
\$1e. \$	$1e.$	$1e.$	$1e.$
\$1e,\$	$1e,$	$1e,$	$1e,$
\$1e.1234\$	$1e.1234$	$1e.1234$	$1e.1234$
\$1e,1234\$	$1e,1234$	$1e,1234$	$1e,1234$
\$1e++1234\$	$1e + +1234$	$1e + +1,234$	$1e + +1,234$
\$1e 1,234\$	$1e1,234$	$1e1,234$	$1e1,234$
\$1e +1234\$	$1e + 1234$	$1e + 1,234$	$1e + 1,234$
\$1 e1,234\$	$1e1,234$	$1e1,234$	$1e1,234$
mixed numbers			
\$1.234,890\$	1.234,890	1.234, 890	1.234, 890
\$1,234.890\$	1,234.890	1,234.890	1,234.890
\$1234e5678\$	1234e5678	1,234e5,678	1,234e5,678
\$+1234e5678\$	+1234e5678	+1,234e5,678	+1,234e5,678
\$1234e+5678\$	1234e + 5678	1,234e + 5,678	1,234e + 5,678
\$1.234e5.678\$	1.234e5.678	1.234e5.678	1.234e5.678
\$1,234e5,678\$	1,234e5,678	1,234e5,678	1,234e5,678
single characters			
\$\sqrt{1}\$	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$
\$\sqrt{1}234\$	$\sqrt{1}234$	$\sqrt{1},234$	$\sqrt{1},234$
\$\sqrt{+}\$	$\sqrt{+}$	$\sqrt{+}$	$\sqrt{+}$
\$\sqrt{++}\$	$\sqrt{++}$	$\sqrt{++}$	$\sqrt{++}$
\$\sqrt{+}1234\$	$\sqrt{+}1234$	$\sqrt{+}1,234$	$\sqrt{+}1,234$
\$1e\sqrt{+}1234\$	$1e\sqrt{+}1234$	$1e\sqrt{+}1,234$	$1e\sqrt{+}1,234$
\$1\sqrt{+}1234e0\$	$1\sqrt{+}1234e0$	$1\sqrt{+}1,234e0$	$1\sqrt{+}1,234e0$

Options exponent=rmE

This is test output of the `ionumbers` L^AT_EX package. The default L^AT_EX output, the output with `ionumbers` package and the expected output with `ionumbers` package is given for different inputs.

If the package `ionumbers` works correctly, the contents in the ‘`ionumbers`’ columns and the respective contents in the ‘expected’ columns must be identical.

input	L ^A T _E X	ionumbers	expected
simple digits			
\$1\$	1	1	1
\$12\$	12	12	12
\$123\$	123	123	123
\$1234\$	1234	1234	1234
\$12345\$	12345	12345	12345
\$123456\$	123456	123456	123456
\$1234567\$	1234567	1234567	1234567
point			
\$.1\$	.1	.1	.1
\$1. \$	1.	1.	1.
\$1.1\$	1.1	1.1	1.1
\$1. 2\$	1.2	1.2	1.2
\$1 . 2\$	1.2	1.2	1.2
\$1.23456\$	1.23456	1.23456	1.23456
\$12345.6\$	12345.6	12345.6	12345.6
\$1.23.456\$	1.23.456	1.23.456	1.23.456
\$a.b\$	<i>a</i> . <i>b</i>	<i>a</i> . <i>b</i>	<i>a</i> . <i>b</i>
\$a.1\$	<i>a</i> .1	<i>a</i> .1	<i>a</i> .1
\$1.a\$	1. <i>a</i>	1. <i>a</i>	1. <i>a</i>
comma			
,\$1\$	,1	,1	,1
\$1,\$	1,	1,	1,
\$1,1\$	1,1	1,1	1,1
\$1, 2\$	1,2	1,2	1,2
\$1 , 2\$	1,2	1,2	1,2
\$1,23456\$	1,23456	1,23456	1,23456
\$12345,6\$	12345,6	12345,6	12345,6
\$1,23,456\$	1,23,456	1,23,456	1,23,456
\$a,b\$	<i>a</i> , <i>b</i>	<i>a</i> , <i>b</i>	<i>a</i> , <i>b</i>
\$a,1\$	<i>a</i> ,1	<i>a</i> ,1	<i>a</i> ,1
\$1,a\$	1, <i>a</i>	1, <i>a</i>	1, <i>a</i>

input	L ^A T _E X	ionumbers	expected
plus and minus			
\$+1\$	+1	+1	+1
\$-1\$	-1	-1	-1
\$++1\$	++1	++1	++1
\$+ +1\$	++1	++1	++1
\$+ + 1\$	++1	++1	++1
\$1+2\$	1 + 2	1 + 2	1 + 2
\$1+ 2\$	1 + 2	1 + 2	1 + 2
\$1 +2\$	1 + 2	1 + 2	1 + 2
\$1 + 2\$	1 + 2	1 + 2	1 + 2
\$1++2\$	1 ++2	1 ++2	1 ++2
\$x+1\$	$x + 1$	$x + 1$	$x + 1$
\$1+x\$	$1 + x$	$1 + x$	$1 + x$
\$x+y\$	$x + y$	$x + y$	$x + y$
letter ‘e’			
\$1e1234\$	$1e1234$	1E1234	1E1234
\$1e+1234\$	$1e + 1234$	1E+1234	1E+1234
\$1e. \$	$1e.$	1E.	1E.
\$1e, \$	$1e,$	1E,	1E,
\$1e.1234\$	$1e.1234$	1E.1234	1E.1234
\$1e,1234\$	$1e,1234$	1E,1234	1E,1234
\$1e++1234\$	$1e + +1234$	1E+ +1234	1E+ +1234
\$1e 1234\$	$1e1234$	1E1234	1E1234
\$1e +1234\$	$1e + 1234$	1E+1234	1E+1234
\$1 e1234\$	$1e1234$	1e1234	1e1234
mixed numbers			
\$1.234,890\$	1.234,890	1.234,890	1.234,890
\$1,234.890\$	1,234.890	1,234.890	1,234.890
\$1234e5678\$	1234e5678	1234E5678	1234E5678
\$+1234e5678\$	+1234e5678	+1234E5678	+1234E5678
\$1234e+5678\$	1234e + 5678	1234E+5678	1234E+5678
\$1.234e5.678\$	1.234e5.678	1.234E5.678	1.234E5.678
\$1,234e5,678\$	1,234e5,678	1,234E5,678	1,234E5,678
single characters			
\$\sqrt{1}\$	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$
\$\sqrt{1234}\$	$\sqrt{1234}$	$\sqrt{1234}$	$\sqrt{1234}$
\$\sqrt{+}\$	$\sqrt{+}$	$\sqrt{+}$	$\sqrt{+}$
\$\sqrt{++}\$	$\sqrt{++}$	$\sqrt{++}$	$\sqrt{++}$
\$\sqrt{+1234}\$	$\sqrt{+1234}$	$\sqrt{+1234}$	$\sqrt{+1234}$
\$fails\$	fails	fails	fails
\$\sqrt{+1234e0}\$	$1\sqrt{+1234e0}$	$1\sqrt{+1234E0}$	$1\sqrt{+1234E0}$

Options exponent=timestento

This is test output of the `ionumbers` L^AT_EX package. The default L^AT_EX output, the output with `ionumbers` package and the expected output with `ionumbers` package is given for different inputs.

If the package `ionumbers` works correctly, the contents in the ‘`ionumbers`’ columns and the respective contents in the ‘expected’ columns must be identical.

input	L ^A T _E X	ionumbers	expected
simple digits			
\$1\$	1	1	1
\$12\$	12	12	12
\$123\$	123	123	123
\$1234\$	1234	1234	1234
\$12345\$	12345	12345	12345
\$123456\$	123456	123456	123456
\$1234567\$	1234567	1234567	1234567
point			
\$.1\$	.1	.1	.1
\$1. \$	1.	1.	1.
\$1.1\$	1.1	1.1	1.1
\$1. 2\$	1.2	1.2	1.2
\$1 . 2\$	1.2	1.2	1.2
\$1.23456\$	1.23456	1.23456	1.23456
\$12345.6\$	12345.6	12345.6	12345.6
\$1.23.456\$	1.23.456	1.23.456	1.23.456
\$a.b\$	<i>a</i> . <i>b</i>	<i>a</i> . <i>b</i>	<i>a</i> . <i>b</i>
\$a.1\$	<i>a</i> .1	<i>a</i> .1	<i>a</i> .1
\$1.a\$	1. <i>a</i>	1. <i>a</i>	1. <i>a</i>
comma			
,\$1\$	,1	,1	,1
\$1,\$	1,	1,	1,
\$1,1\$	1,1	1,1	1,1
\$1, 2\$	1,2	1,2	1,2
\$1 , 2\$	1,2	1,2	1,2
\$1,23456\$	1,23456	1,23456	1,23456
\$12345,6\$	12345,6	12345,6	12345,6
\$1,23,456\$	1,23,456	1,23,456	1,23,456
\$a,b\$	<i>a</i> , <i>b</i>	<i>a</i> , <i>b</i>	<i>a</i> , <i>b</i>
\$a,1\$	<i>a</i> ,1	<i>a</i> ,1	<i>a</i> ,1
\$1,a\$	1, <i>a</i>	1, <i>a</i>	1, <i>a</i>

input	\LaTeX	ionumbers	expected
plus and minus			
$\$+1\$$	+1	+1	+1
$\$-1\$$	-1	-1	-1
$\$++1\$$	++1	++1	++1
$\$+ +1\$$	++1	++1	++1
$\$+ + 1\$$	++1	++1	++1
$\$1+2\$$	1+2	1+2	1+2
$\$1+ 2\$$	1+2	1+2	1+2
$\$1 +2\$$	1+2	1+2	1+2
$\$1++2\$$	1++2	1++2	1++2
$\$x+1\$$	$x+1$	$x+1$	$x+1$
$\$1+x\$$	$1+x$	$1+x$	$1+x$
$\$x+y\$$	$x+y$	$x+y$	$x+y$
letter ‘e’			
$\$1e1234\$$	$1e1234$	1×10^{1234}	1×10^{1234}
$\$1e+1234\$$	$1e + 1234$	$1 \times 10^{+1234}$	$1 \times 10^{+1234}$
$\$1e.\$$	$1e.$	$1 \times 10.$	$1 \times 10.$
$\$1e, \$$	$1e,$	$1 \times 10,$	$1 \times 10,$
$\$1e.1234\$$	$1e.1234$	$1 \times 10.^{1234}$	$1 \times 10.^{1234}$
$\$1e,1234\$$	$1e,1234$	$1 \times 10.^{1234}$	$1 \times 10.^{1234}$
$\$1e++1234\$$	$1e + +1234$	$1 \times 10^{++1234}$	$1 \times 10^{++1234}$
$\$1e~1234\$$	$1e1234$	1×10^{1234}	1×10^{1234}
$\$1e~+1234\$$	$1e + 1234$	$1 \times 10^{+1234}$	$1 \times 10^{+1234}$
$\$1~e1234\$$	$1e1234$	$1e1234$	$1e1234$
mixed numbers			
$\$1.234,890\$$	1.234,890	1.234,890	1.234,890
$\$1,234.890\$$	1,234.890	1,234.890	1,234.890
$\$1234e5678\$$	1234e5678	1234×10^{5678}	1234×10^{5678}
$\$+1234e5678\$$	$+1234e5678$	$+1234 \times 10^{5678}$	$+1234 \times 10^{5678}$
$\$1234e+5678\$$	$1234e + 5678$	$1234 \times 10^{+5678}$	$1234 \times 10^{+5678}$
$\$1.234e5.678\$$	1.234e5.678	$1.234 \times 10^{5.678}$	$1.234 \times 10^{5.678}$
$\$1,234e5,678\$$	1,234e5,678	$1,234 \times 10^{5,678}$	$1,234 \times 10^{5,678}$
single characters			
$\$\sqrt{1}\$$	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$
$\$\sqrt{1234}\$$	$\sqrt{1234}$	$\sqrt{1234}$	$\sqrt{1234}$
$\$\sqrt{+}\$$	$\sqrt{+}$	$\sqrt{+}$	$\sqrt{+}$
$\$\sqrt{++}\$$	$\sqrt{++}$	$\sqrt{++}$	$\sqrt{++}$
$\$\sqrt{+1234}\$$	$\sqrt{+1234}$	$\sqrt{+1234}$	$\sqrt{+1234}$
$\$fails\$$	fails	fails	fails
$\$1\sqrt{+1234}e0\$$	$1\sqrt{+1234}e0$	$1\sqrt{+1234} \times 10^0$	$1\sqrt{+1234} \times 10^0$

Options `comma=decimal`,`point=thousands`

This is test output of the `ionumbers` L^AT_EX package. The default L^AT_EX output, the output with `ionumbers` package and the expected output with `ionumbers` package is given for different inputs.

If the package `ionumbers` works correctly, the contents in the ‘`ionumbers`’ columns and the respective contents in the ‘expected’ columns must be identical.

input	L ^A T _E X	ionumbers	expected
simple digits			
\$1\$	1	1	1
\$12\$	12	12	12
\$123\$	123	123	123
\$1234\$	1234	1234	1234
\$12345\$	12345	12345	12345
\$123456\$	123456	123456	123456
\$1234567\$	1234567	1234567	1234567
point			
\$.1\$	.1	,1	,1
\$1. \$	1.	1.	1.
\$1.1\$	1.1	1,1	1,1
\$1. 2\$	1.2	1.2	1.2
\$1 .2\$	1.2	1,2	1,2
\$1.23456\$	1.23456	1,23456	1,23456
\$12345.6\$	12345.6	12345,6	12345,6
\$1.23.456\$	1.23.456	1,23,456	1,23,456
\$a.b\$	<i>a.b</i>	<i>a.b</i>	<i>a.b</i>
\$a.1\$	<i>a.1</i>	<i>a,1</i>	<i>a,1</i>
\$1.a\$	<i>1.a</i>	<i>1.a</i>	<i>1.a</i>
comma			
,\$1\$	,1	.1	.1
\$1,\$	1,	1,	1,
\$1,1\$	1,1	1.1	1.1
\$1, 2\$	1,2	1,2	1,2
\$1 ,2\$	1,2	1.2	1.2
\$1,23456\$	1,23456	1.23456	1.23456
\$12345,6\$	12345,6	12345.6	12345.6
\$1,23,456\$	1,23,456	1.23.456	1.23.456
\$a,b\$	<i>a,b</i>	<i>a,b</i>	<i>a,b</i>
\$a,1\$	<i>a,1</i>	<i>a.1</i>	<i>a.1</i>
\$1,a\$	<i>1,a</i>	<i>1,a</i>	<i>1,a</i>

input	L ^A T _E X	ionumbers	expected
plus and minus			
\$+1\$	+1	+1	+1
\$-1\$	-1	-1	-1
\$++1\$	++1	++1	++1
\$+ +1\$	++1	++1	++1
\$+ + 1\$	++1	++1	++1
\$1+2\$	1+2	1+2	1+2
\$1+ 2\$	1+2	1+2	1+2
\$1 +2\$	1+2	1+2	1+2
\$1++2\$	1++2	1++2	1++2
\$x+1\$	$x+1$	$x+1$	$x+1$
\$1+x\$	$1+x$	$1+x$	$1+x$
\$x+y\$	$x+y$	$x+y$	$x+y$
letter ‘e’			
\$1e1234\$	$1e1234$	$1e1234$	$1e1234$
\$1e+1234\$	$1e + 1234$	$1e + 1234$	$1e + 1234$
\$1e. \$	$1e.$	$1e.$	$1e.$
\$1e, \$	$1e,$	$1e,$	$1e,$
\$1e.1234\$	$1e.1234$	$1e, 1234$	$1e, 1234$
\$1e,1234\$	$1e, 1234$	$1e.1234$	$1e.1234$
\$1e++1234\$	$1e ++1234$	$1e ++1234$	$1e ++1234$
\$1e 1234\$	$1e1234$	$1e1234$	$1e1234$
\$1e +1234\$	$1e + 1234$	$1e + 1234$	$1e + 1234$
\$1 e1234\$	$1e1234$	$1e1234$	$1e1234$
mixed numbers			
\$1.234,890\$	1.234,890	1,234.890	1,234.890
\$1,234.890\$	1,234.890	1.234,890	1.234,890
\$1234e5678\$	1234e5678	1234e5678	1234e5678
\$+1234e5678\$	+1234e5678	+1234e5678	+1234e5678
\$1234e+5678\$	1234e+5678	1234e+5678	1234e+5678
\$1.234e5.678\$	1.234e5.678	1,234e5,678	1,234e5,678
\$1,234e5,678\$	1,234e5,678	1.234e5.678	1.234e5.678
single characters			
\$\sqrt{1}\$	$\sqrt{1}$	$\sqrt{1}$	$\sqrt{1}$
\$\sqrt{1234}\$	$\sqrt{1234}$	$\sqrt{1234}$	$\sqrt{1234}$
\$\sqrt{+}\$	$\sqrt{+}$	$\sqrt{+}$	$\sqrt{+}$
\$\sqrt{++}\$	$\sqrt{++}$	$\sqrt{++}$	$\sqrt{++}$
\$\sqrt{+1234}\$	$\sqrt{+1234}$	$\sqrt{+1234}$	$\sqrt{+1234}$
\$1e\sqrt{+1234}\$	$1e\sqrt{+1234}$	$1e\sqrt{+1234}$	$1e\sqrt{+1234}$
\$1\sqrt{+1234e0}\$	$1\sqrt{+1234e0}$	$1\sqrt{+1234e0}$	$1\sqrt{+1234e0}$