

Problem: Build a regular expression that will recognize an arithmetic expression using integers, addition, and multiplication.

Successful strings:

Just an integer

Single-digit integers, single operation:

$4 * 8$

$1 + 2$

Multiple-digit integers, single operation:

$22 * 54267$

$1000000 * 45$

Mixed single-digit and multiple-digit integers, single operation:

$1 * 4506890835$

$200 * 3$

Multiple operations:

$4 * 567 + 98 * 7654 + 9 * 0 + 123456$

Spacing – no space:

$4*556+0*12$

Spacing – a lot of space:

$59 * 12$

Failing strings:

$56a + \$2$

$56 +$

$3.5 + 2$

$-5 * 23$ (left as an exercise for you!)

More than one zero (e.g. 000), or string starting with a zero followed by other digits (e.g. 007)