1 RPN Encoding

1.1 Nice Functions

```
\begin{array}{lll} x\ y\ +=x+y & x\ y\ -=x-y & x\ y\ *=x\times y \\ x\ y\ /=\frac{x}{y} & x\ y\ \hat{\ }=x^y \\ x\ y\ \mathbf{b}=\log_y x & x\ \mathbf{l}=\ln(x) & x\ \mathbf{a}=|x| \end{array}
```

1.2 Trig Functions

```
x = \sin(x)
                           x c = \cos(x)
                                                       x t = \tan(x)
x = \arcsin(x)
                           x v = \arccos(x)
                                                       x \le \arctan(x)
x p = \sec(x)
                            x \neq \csc(x)
                                                       x r = \cot(x)
                                                       x f = \operatorname{arccot}(x)
x d = \operatorname{arcsec}(x)
                            x = \operatorname{arccsc}(x)
x h = \sinh(x)
                                                       x j = \tanh(x)
                            x i = \cosh(x)
x = \operatorname{arcsech}(x)
                           x = \operatorname{arccoth}(x) x = \operatorname{arccsch}(x)
x = \operatorname{sech}(x)
                            x k = \operatorname{csch}(x)
                                                       x z = \coth(x)
x A = \operatorname{arcsec}(x)
                            x B = \operatorname{arccsc}(x)
                                                       x C = \operatorname{arccot}(x)
```

2 Requirements

- The RPN expression must have every argument separated by one space.
- The RPN expression must have a trailing space.