# aops.pro User Guide

**Description:** This document is a guide to work with the collection of arithmetic programs located within the aops.pro knowledge base. For each program, there is a description of what it does, the correct syntax for using it, and an example of the program being used.

**declare:** Sets a given value to a given variable in the knowledge base.
**Usage: decalre(Var,Var1).**
**Example:**

```
? declare(a,5).
true.
```

**add:** Outputs the sum of the two given variables.
**Usage:** add(Variable1,Variable2,Sum).
**Example:**

```
? declare(a,5).
true.

? declare(b,3).
true.

? add(a,b,X).
X = 8.
```

**sub:** Outputs the value of the first variable minus the second.
**Usage:** sub(Variable1,Variable2,Diff).
**Example:**

```
? declare(a,5).
true.

? declare(b,3).
true.

? sub(a,b,X).
X = 2.
```

**mul:** Outputs the product of the two given variables.
**Usage:** mul(Variable1,Variable2,Prod).
**Example:**

```
? declare(a,5).
true.

? declare(b,3).
true.

? mul(a,b,X).
X = 15.
```

**div:** outputs the value of the first variable divided by the second variable.
**Usage:** div(Variable1,Variable2,Quo).
**Example:**

```
? declare(a,5).
true.

? declare(b,3).
true.

? div(a,b,X).
X = 1.6666666666666667.
```

**pow:** Outputs the value of the first variable to the power of the second variable.
**Usage:** pow(Variable1,Variable2,Exp).
**Example:**

```
? declare(a,5).
true.

? declare(b,3).
true.

? pow(a,b,X).
X = 125.
```