

We introduce the structure constants of sl_2
We show the Killing-Cartan metric

```
-8.00 0.00 0.00
0.00 8.00 0.00
0.00 0.00 8.00
```

and its determinant
-512.0

In what follows we expand sl_2 with all the abelian semigroups of order 2 having zero element and identify the ones that leads to a semisimple algebra.

A semisimple algebra has been found, expanding with the semigroup #2

1 1

1 2

whose zero element is: 1.

The metric of the reduced algebra is:

```
-8.00 0.00 0.00
0.00 8.00 0.00
0.00 0.00 8.00
```

and its determinant
-512.0

There are 2 semigroups of order 2 with zero element.
And 1 of them leads to a semisimple algebra.