We introduce the structure constants of sl2
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 sl2 with all the abelian semigroups of order 3 having zero element and identify the ones that leads to a semisimple algebra.
****
A semisimple algebra has been found, expanding with the semigroup #7
1 1 1
1 2 1
1 1 3
whose zero element is: 1.
The metric of the reduced algebra is:

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

and its determinant
262144.0
****
A semisimple algebra has been found, expanding with the semigroup #10
1 1 1
1 2 2
1 2 3
whose zero element is: 1.
The metric of the reduced algebra is:

```
 -8.00 -8.00 0.00 0.00 0.00 0.00
 -8.00 -16.00 0.00 0.00 0.00 0.00
 0.00 0.00 8.00 8.00 0.00 0.00
 0.00 0.00 8.00 16.00 0.00 0.00
 0.00 0.00 0.00 0.00 8.00 8.00
 0.00 0.00 0.00 0.00 8.00 16.00
```

and its determinant
262144.0
****
A semisimple algebra has been found, expanding with the semigroup #12
1 1 1
1 2 3
1 3 2
whose zero element is: 1.
The metric of the reduced algebra is:

```
 -16.00 0.00 0.00 0.00 0.00 0.00
 0.00 -16.00 0.00 0.00 0.00 0.00
 0.00 0.00 16.00 0.00 0.00 0.00
 0.00 0.00 0.00 16.00 0.00 0.00
 0.00 0.00 0.00 0.00 16.00 0.00
 0.00 0.00 0.00 0.00 0.00 16.00

and its determinant
1.6777216E7
**********

There are 8 semigroups of order 3 with zero element.
And 3 of them leads to a semisimple algebra.
```