

```
$ make test
./main.out
```

```
1 4.000000000
2 0.356932193
3 3.09238203E-05
4 1.26408902E-23
5 0.000000000
6 0.000000000
7 0.000000000
8 0.000000000
9 0.000000000
10 0.000000000
```

NA

```
-3.11202371E-08 0.000000000 0.000000000
0.000000000 3.000000000 0.000000000
0.000000000 0.000000000 0.999999940
```

NX

```
0.577350259 0.408248365 -0.707106829
-0.577350318 0.816496730 -4.49512036E-08
0.577350259 0.408248335 0.707106829
```

```
-----
check
```

A\*NX ?= NA\*NX

A\*NX

```
-5.96046448E-08 1.22474504 -0.707106888
-1.19209290E-07 2.44949031 -1.19209290E-07
-5.96046448E-08 1.22474504 0.707106769
```

NX\*NA

```
-1.79672774E-08 1.22474504 -0.707106769
1.79672792E-08 2.44949007 -4.49512001E-08
-1.79672774E-08 1.22474504 0.707106769
```

```
-----
result
```

Eigenvektoren

```
0.577350259 | 0.408248365 | -0.707106829 |
-0.577350318 | 0.816496730 | -4.49512036E-08 |
0.577350259 | 0.408248335 | 0.707106829 |
```

Eigenwerte

```
-3.11202371E-08 | 3.000000000 | 0.999999940 |
```

g