> restart;
> grtw();

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c:/Grtii(6)/Metrics

> with(codegen,cost);
First note how cost counts:
> C:=x+y;

> codegen[cost](C);

> C1:=x+y+z;

> codegen[cost](C1);

> interface(labelling=false);
> qload(fourd);

Default spacetime = fourd
For the fourd spacetime:
Coordinates
x( up )
x a = [x1, x2, x3, x4]

Line element
\[ ds^2 = a(x, x2, x3, x4) \, dx_1^2 + 2 b(x, x2, x3, x4) \, dx_1 \, dx_2 + 2 c(x, x2, x3, x4) \, dx_1 \, dx_3 \]
+ 2 d(x, x2, x3, x4) \, dx_1 \, dx_4 + f(x, x2, x3, x4) \, dx_2^2 + 2 h(x, x2, x3, x4) \, dx_2 \, dx_3 \]
+ 2 i(x, x2, x3, x4) \, dx_2 \, dx_4 + j(x, x2, x3, x4) \, dx_3^2 + 2 k(x, x2, x3, x4) \, dx_3 \, dx_4 \]
+ l(x, x2, x3, x4) \, dx_4^2

> grOptionDefaultSimp:=0;
> grdef(`RR11:=g{^c ^d}*R{c $x1 $x1 d}`):
Created definition for RR11

> grdef(`RR12:=g{^c ^d}*R{c $x1 $x2 d}`):
Created definition for RR12

> grcalc(RR11):

CPU Time = .170

> codegen[cost](numer(grcomponent(RR11, [])));

9989 additions = 9990 terms

> grcalc(RR12):

CPU Time = .040
```plaintext
> codegen[cost](numer(grcomponent(RR12, [])));  
13279 additions + 111735 functions + 103936 multiplications

13279 additions=13280 terms
> 
```