> restart:
> grtw();

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e:/Grtii(6)/Metrics

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

> codegen[cost](C);

 additions

> C1:=x+y+z;

> codegen[cost](C1);

 2 additions

> interface(labelling=false):
> qload(threed);

Default spacetime = threed
For the threed spacetime:
Coordinates
x(up)
\( x^a = [x1, x2, x3] \)
Line element
\[
\begin{align*}
    ds^2 &= a(x1, x2, x3) \, dx1^2 + 2 b(x1, x2, x3) \, dx1 \, dx2 + 2 c(x1, x2, x3) \, dx1 \, dx3 + d(x1, x2, x3) \, dx2^2 \\
          &+ 2 e(x1, x2, x3) \, dx2 \, dx3 + f(x1, x2, x3) \, dx3^2
\end{align*}
\]
> 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 = .030
> codegen[cost](numer(grcomponent(RR11,[])));

415 additions + 2420 multiplications + 2788 functions

> grcalc(RR12):

CPU Time = 0.
> codegen[cost](numer(grcomponent(RR12,[])));

518 additions + 2952 multiplications + 3518 functions
518 additions=519 terms