Minkowsky Metric in cylindrical coordinates:

$\boxed{x^{\mu}}$

$x^0 = t.$
$x^1 = r.$
$x^2 = \phi.$
$x^3 = z.$

$\boxed{g_{\mu\nu}}$

$g_{00} = 1.$
$g_{01} = 0.$
$g_{02} = 0.$
$g_{03} = 0.$
$g_{10} = 0.$
$g_{11} = -1.$
$g_{12} = 0.$
$g_{13} = 0.$
$g_{20} = 0.$
$g_{21} = 0.$
$g_{22} = -r^2.$
$g_{23} = 0.$
$g_{30} = 0.$
$g_{31} = 0.$
$g_{32} = 0.$
$g_{33} = -1.$

$\boxed{\sqrt{} = \sqrt{-\det(g_{\mu\nu})}}$

$\sqrt{} = \sqrt{r^2}.$

$\boxed{g^{\mu\nu}}$

$g^{00} = 1.$
$g^{01} = 0.$
$g^{02} = 0.$
$g^{03} = 0.$
$g^{10} = 0.$
$g^{11} = -1.$
$g^{12} = 0.$
$g^{13} = 0.$
$g^{20} = 0.$
$g^{21} = 0.$
$g^{22} = -\dfrac{1}{r^2}.$
$g^{23} = 0.$
$g^{30} = 0.$
$g^{31} = 0.$
$g^{32} = 0.$
$g^{33} = -1.$

$\boxed{\Gamma^{\sigma}_{\mu\nu}}$

$\Gamma^0_{00} = 0.$
$\Gamma^0_{01} = 0.$
$\Gamma^0_{02} = 0.$
$\Gamma^0_{03} = 0.$
$\Gamma^0_{10} = 0.$
$\Gamma^0_{11} = 0.$
$\Gamma^0_{12} = 0.$
$\Gamma^0_{13} = 0.$
$\Gamma^0_{20} = 0.$
$\Gamma^0_{21} = 0.$
$\Gamma^0_{22} = 0.$
$\Gamma^0_{23} = 0.$
$\Gamma^0_{30} = 0.$
$\Gamma^0_{31} = 0.$
$\Gamma^0_{32} = 0.$
$\Gamma^0_{33} = 0.$

$\Gamma^1_{00} = 0.$
$\Gamma^1_{01} = 0.$
$\Gamma^1_{02} = 0.$
$\Gamma^1_{03} = 0.$
$\Gamma^1_{10} = 0.$
$\Gamma^1_{11} = 0.$
$\Gamma^1_{12} = 0.$
$\Gamma^1_{13} = 0.$
$\Gamma^1_{20} = 0.$
$\Gamma^1_{21} = 0.$
$\Gamma^1_{22} = -r.$
$\Gamma^1_{23} = 0.$
$\Gamma^1_{30} = 0.$
$\Gamma^1_{31} = 0.$
$\Gamma^1_{32} = 0.$
$\Gamma^1_{33} = 0.$

$\Gamma^2_{00} = 0.$
$\Gamma^2_{01} = 0.$
$\Gamma^2_{02} = 0.$
$\Gamma^2_{03} = 0.$
$\Gamma^2_{10} = 0.$
$\Gamma^2_{11} = 0.$
$\Gamma^2_{12} = \frac{1}{r}.$
$\Gamma^2_{13} = 0.$
$\Gamma^2_{20} = 0.$
$\Gamma^2_{21} = \frac{1}{r}.$
$\Gamma^2_{22} = 0.$
$\Gamma^2_{23} = 0.$
$\Gamma^2_{30} = 0.$
$\Gamma^2_{31} = 0.$
$\Gamma^2_{32} = 0.$
$\Gamma^2_{33} = 0.$

$\Gamma^3_{00} = 0.$
$\Gamma^3_{01} = 0.$
$\Gamma^3_{02} = 0.$
$\Gamma^3_{03} = 0.$
$\Gamma^3_{10} = 0.$
$\Gamma^3_{11} = 0.$
$\Gamma^3_{12} = 0.$
$\Gamma^3_{13} = 0.$
$\Gamma^3_{20} = 0.$
$\Gamma^3_{21} = 0.$
$\Gamma^3_{22} = 0.$
$\Gamma^3_{23} = 0.$
$\Gamma^3_{30} = 0.$
$\Gamma^3_{31} = 0.$
$\Gamma^3_{32} = 0.$
$\Gamma^3_{33} = 0.$

$\boxed{R_{\mu\nu}}$

$R_{00} = 0.$
$R_{01} = 0.$
$R_{02} = 0.$
$R_{03} = 0.$
$R_{10} = 0.$
$R_{11} = 0.$
$R_{12} = 0.$
$R_{13} = 0.$
$R_{20} = 0.$
$R_{21} = 0.$
$R_{22} = 0.$
$R_{23} = 0.$
$R_{30} = 0.$
$R_{31} = 0.$
$R_{32} = 0.$
$R_{33} = 0.$

$\boxed{R^\mu_{\ \nu}}$

$R^0_{\ 0} = 0.$
$R^0_{\ 1} = 0.$
$R^0_{\ 2} = 0.$
$R^0_{\ 3} = 0.$
$R^1_{\ 0} = 0.$
$R^1_{\ 1} = 0.$
$R^1_{\ 2} = 0.$
$R^1_{\ 3} = 0.$
$R^2_{\ 0} = 0.$
$R^2_{\ 1} = 0.$
$R^2_{\ 2} = 0.$
$R^2_{\ 3} = 0.$
$R^3_{\ 0} = 0.$
$R^3_{\ 1} = 0.$
$R^3_{\ 2} = 0.$
$R^3_{\ 3} = 0.$

$\boxed{R}$

$R = 0.$

$\boxed{G^\mu_{\ \nu}}$

$G^0_{\ 0} = 0.$
$G^0_{\ 1} = 0.$
$G^0_{\ 2} = 0.$
$G^0_{\ 3} = 0.$
$G^1_{\ 0} = 0.$
$G^1_{\ 1} = 0.$
$G^1_{\ 2} = 0.$
$G^1_{\ 3} = 0.$
$G^2_{\ 0} = 0.$
$G^2_{\ 1} = 0.$
$G^2_{\ 2} = 0.$
$G^2_{\ 3} = 0.$
$G^3_{\ 0} = 0.$
$G^3_{\ 1} = 0.$
$G^3_{\ 2} = 0.$
$G^3_{\ 3} = 0.$

$\boxed{G}$

$G = 0.$

$\boxed{G^\mu_{\nu;\mu} = 0}$

$G^\mu_{0;\mu} = 0.$

$G^\mu_{1;\mu} = 0.$

$G^\mu_{2;\mu} = 0.$

$G^\mu_{3;\mu} = 0.$

$\boxed{g^{\mu\nu}\,\Gamma^\lambda_{\mu\nu} = 0?}$

$g^{\mu\nu}\,\Gamma^0_{\mu\nu} = 0.$

$g^{\mu\nu}\,\Gamma^1_{\mu\nu} = r^3.$

$g^{\mu\nu}\,\Gamma^2_{\mu\nu} = 0.$

$g^{\mu\nu}\,\Gamma^3_{\mu\nu} = 0.$