

[

$$\begin{aligned}
& (1915553 \cdot \cos(q_3)) / 1953125000 + (21105437293 \cdot \cos(q_4)) / 31250000000 + (32755927981 \cdot \cos(q_6)) / 125000000000 \\
& + (2740951021 \cdot \cos(q_4) \cdot \cos(q_6)) / 7812500000 + (4734679849 \cdot \sin(q_3) \cdot \sin(q_4)) / 250000000000 - (36647684119 \cdot \cos(q_2)^2) / 625000000000 \\
& - (114870848333 \cdot \cos(q_3)^2) / 1000000000000 + (7618384777 \cdot \cos(q_5)^2) / 625000000000 + (7618384777 \cdot \cos(q_6)^2) / 625000000000 \\
& - (21105437293 \cdot \cos(q_2)^2 \cdot \cos(q_4)) / 31250000000 - (32755927981 \cdot \cos(q_3)^2 \cdot \cos(q_6)) / 125000000000 \\
& + (114870848333 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2) / 1000000000000 - (237258851293 \cdot \cos(q_2)^2 \cdot \cos(q_4)^2) / 1000000000000 \\
& - (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_5)^2) / 31250000000 + (237258851293 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2) / 1000000000000 \\
& - (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_6)^2) / 625000000000 - (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_5)^2) / 625000000000 \\
& - (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_6)^2) / 31250000000 - (7618384777 \cdot \cos(q_5)^2 \cdot \cos(q_6)^2) / 625000000000 \\
& - (2740951021 \cdot \cos(q_2)^2 \cdot \cos(q_4) \cdot \cos(q_6)) / 7812500000 + (10421867 \cdot \cos(q_2)^2 \cdot \sin(q_5) \cdot \sin(q_6)) / 976562500 + (10421867 \cdot \cos(q_3)^2 \cdot \sin(q_5) \cdot \sin(q_6)) / 976562500 \\
& + (32755927981 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_6)) / 125000000000 - (32755927981 \cdot \cos(q_2)^2 \cdot \cos(q_4)^2 \cdot \cos(q_6)) / 1250000000000 \\
& + (32755927981 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2 \cdot \cos(q_6)) / 1250000000000 - (237258851293 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2) / 1000000000000 \\
& + (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_5)^2) / 62500000000 + (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_6)^2) / 312500000000 \\
& + (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_4)^2 \cdot \cos(q_5)^2) / 625000000000 - (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_4)^2 \cdot \cos(q_6)^2) / 625000000000 \\
& - (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2 \cdot \cos(q_5)^2) / 625000000000 + (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_5)^2 \cdot \cos(q_6)^2) / 312500000000 \\
& + (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2 \cdot \cos(q_6)^2) / 625000000000 + (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_5)^2 \cdot \cos(q_6)^2) / 625000000000 \\
& - (8538821 \cdot \cos(q_2) \cdot \sin(q_2) \cdot \sin(q_3)) / 244140625 + (80248811 \cdot \cos(q_3) \cdot \sin(q_3) \cdot \sin(q_4)) / 390625000 + (614890153 \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4)) / 625000000000 \\
& + (614890153 \cdot \cos(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 625000000000 - (2740951021 \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 7812500000 + (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2 \cdot \cos(q_5)^2) / 625000000000 \\
& - (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2 \cdot \cos(q_6)^2) / 625000000000 - (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_5)^2 \cdot \cos(q_6)^2) / 625000000000 \\
& + (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2 \cdot \cos(q_5)^2 \cdot \cos(q_6)^2) / 625000000000 - (80248811 \cdot \cos(q_2)^2 \cdot \cos(q_3) \cdot \sin(q_3) \cdot \sin(q_4)) / 3906250000 \\
& + (2740951021 \cdot \cos(q_2)^2 \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 7812500000 - (10421867 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \sin(q_5) \cdot \sin(q_6)) / 976562500 \\
& - (32755927981 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2 \cdot \cos(q_6)) / 125000000000 + (21105437293 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_4)) / 312500000000 \\
& - (80248811 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \sin(q_2) \cdot \sin(q_3)) / 3906250000 + (10421867 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4)) / 976562500 + (614890153 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_6)) / 625000000000 \\
& - (10421867 \cdot \cos(q_2)^2 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4)) / 976562500 + (32755927981 \cdot \cos(q_2)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 1250000000000 \\
& - (32755927981 \cdot \cos(q_3)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 1250000000000 - (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_4)^2 \cdot \cos(q_5)^2 \cdot \cos(q_6)^2) / 625000000000 \\
& + (237258851293 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \sin(q_2) \cdot \sin(q_4)) / 500000000000 + (2740951021 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 7812500000 \\
& - (10421867 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 976562500 - (32755927981 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_6)) / 1250000000000 \\
& + (7618384777 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_5)) / 31250000000 + (10421867 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_6)) / 976562500 \\
& - (2740951021 \cdot \cos(q_2) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 7812500000 + (32755927981 \cdot \cos(q_3) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 1250000000000 \\
& + (32755927981 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 1250000000000 + (32755927981 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 625000000000 \\
& + (2740951021 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_6)) / 7812500000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_6)) / 312500000000 \\
& + (7618384777 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_5)) / 31250000000 - (32755927981 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 1250000000000 \\
& + (10421867 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_6)) / 976562500 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 312500000000 \\
& - (7618384777 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5)^2 \cdot \sin(q_2) \cdot \sin(q_4)) / 31250000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_4)) / 312500000000 \\
& + (32755927981 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_6)) / 625000000000 - (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_5)) / 312500000000 \\
& - (10421867 \cdot \cos(q_2)^2 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_6)) / 976562500 - (7618384777 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6)^2 \cdot \sin(q_3) \cdot \sin(q_5)) / 312500000000 \\
& + (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_4) \cdot \sin(q_6)) / 312500000000 - (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_4) \cdot \sin(q_6)) / 312500000000 \\
& - (32755927981 \cdot \cos(q_2)^2 \cdot \cos(q_3) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 1250000000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5)^2 \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_4)) / 312500000000 \\
& + (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6)^2 \cdot \sin(q_3) \cdot \sin(q_5)) / 312500000000 + (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_4) \cdot \sin(q_6)) / 312500000000 \\
& - (7618384777 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 312500000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_6)) / 156250000000 \\
& - (7618384777 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_5)) / 312500000000 - (7618384777 \cdot \cos(q_2)^2 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 312500000000 \\
& + 189344513501 / 2000000000000, (80248811 \cdot \cos(q_3)^2 \cdot \sin(q_2) \cdot \sin(q_4)) / 3906250000 - (8538821 \cdot \cos(q_2) \cdot \cos(q_3)) / 488281250
\end{aligned}$$

$$\begin{aligned} & - (4734679849 \cdot \cos(q_2) \cdot \cos(q_4)) / 500000000000 - (1915553 \cdot \sin(q_2) \cdot \sin(q_3)) / 3906250000 - (80248811 \cdot \sin(q_2) \cdot \sin(q_4)) / 7812500000 - (133244479 \cdot \cos(q_2)) / 6250000000 - (80248811 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4)) / 7812500000 - (614890153 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_6)) / 125000000000 + (114870848333 \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_3)) / 1000000000000 - (21105437293 \cdot \cos(q_2) \cdot \sin(q_3) \cdot \sin(q_4)) / 62500000000 + (4734679849 \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_4)) / 500000000000 - (10421867 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 1953125000 - (237258851293 \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 1000000000000 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_5)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 62500000000 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 31250000000 + (10421867 \cdot \cos(q_3)^2 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 976562500 - (10421867 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_6)) / 1953125000 - (237258851293 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \sin(q_3) \cdot \sin(q_4)) / 1000000000000 + (32755927981 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 125000000000 - (2740951021 \cdot \cos(q_2) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4)) / 15625000000 + (614890153 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 125000000000 - (2740951021 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 15625000000 + (32755927981 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_6)) / 250000000000 - (7618384777 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_5)) / 62500000000 + (614890153 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 125000000000 - (10421867 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_6)) / 1953125000 - (614890153 \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 125000000000 - (32755927981 \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 250000000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_5)^2 \cdot \sin(q_3) \cdot \sin(q_4)) / 62500000000 - (32755927981 \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 125000000000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_6)^2 \cdot \sin(q_3) \cdot \sin(q_4)) / 62500000000 + (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_5)) / 31250000000 - (32755927981 \cdot \cos(q_2) \cdot \cos(q_4)^2 \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_6)) / 125000000000 + (10421867 \cdot \cos(q_3)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_6)) / 976562500 + (7618384777 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_5)) / 6250000000 + (32755927981 \cdot \cos(q_3)^2 \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 125000000000 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_5)) / 62500000000 - (7618384777 \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 62500000000 - (7618384777 \cdot \cos(q_3) \cdot \cos(q_5)^2 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 62500000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_5)) / 62500000000 - (32755927981 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4)) / 12500000000 - (32755927981 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 250000000000 + (10421867 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 1953125000 - (2740951021 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_6)) / 15625000000 + (614890153 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_6)) / 125000000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4)) / 62500000000 - (10421867 \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 976562500 - (7618384777 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 62500000000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_5)^2 \cdot \cos(q_6)^2 \cdot \sin(q_3) \cdot \sin(q_4)) / 62500000000 - (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_5)) / 31250000000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_6) \cdot \sin(q_5) \cdot \sin(q_6)) / 62500000000 - (7618384777 \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \cos(q_5) \cdot \cos(q_6)^2 \cdot \sin(q_4) \cdot \sin(q_5)) / 62500000000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_4)^2 \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_6)) / 31250000000 + (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 31250000000 + (32755927981 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_6)) / 125000000000 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_6)) / 31250000000, (359646854253 \cdot \cos(q_2)) / 1000000000000 + (1915553 \cdot \cos(q_2) \cdot \cos(q_3)) / 3906250000 + (32755927981 \cdot \cos(q_2) \cdot \cos(q_6)) / 125000000000 - (8538821 \cdot \sin(q_2) \cdot \sin(q_3)) / 488281250 - (237258851293 \cdot \cos(q_2) \cdot \cos(q_4)^2) / 1000000000000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_5)^2) / 62500000000 - (32755927981 \cdot \cos(q_2) \cdot \cos(q_4)^2 \cdot \cos(q_6)) / 125000000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_4)^2 \cdot \cos(q_5)^2) / 62500000000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_4)^2 \cdot \cos(q_6)^2) / 62500000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_5)^2 \cdot \cos(q_6)^2) / 62500000000 + (4734679849 \cdot \cos(q_2) \cdot \sin(q_3) \cdot \sin(q_4)) / 500000000000 + (21105437293 \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_4)) / 62500000000 - (80248811 \cdot \cos(q_4) \cdot \sin(q_2) \cdot \sin(q_3)) / 7812500000 + (10421867 \cdot \cos(q_2) \cdot \sin(q_5) \cdot \sin(q_6)) / 976562500 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_4)^2 \cdot \cos(q_5)^2 \cdot \cos(q_6)^2) / 62500000000 + (237258851293 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \sin(q_2) \cdot \sin(q_4)) / 1000000000000 + (614890153 \cdot \cos(q_2) \cdot \cos(q_6) \cdot \sin$$

$$\begin{aligned} & s(q_6) \cdot \sin(q_2) \cdot \sin(q_6)) / 31250000000 - (7618384777 \cdot \cos(q_5) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_5)) / 6250000 \\ & 0000, (237258851293 \cdot \sin(q_2) \cdot \sin(q_3)) / 1000000000000 - (80248811 \cdot \cos(q_2) \cdot \cos(q_4)) / 7812500000 + (4734679849 \\ & \cdot \sin(q_2) \cdot \sin(q_4)) / 500000000000 + (7618384777 \cdot \cos(q_5)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 62500000000 + (7618384777 \cdot \cos(q_6 \\ &)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 62500000000 - (4734679849 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4)) / 500000000000 - (10421867 \cdot \cos(q_2) \cdot \\ & \cos(q_4) \cdot \cos(q_6)) / 1953125000 + (80248811 \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_4)) / 7812500000 + (21105437293 \cdot \cos(q_4) \cdot \sin(q_2) \\ &) \cdot \sin(q_3)) / 62500000000 + (32755927981 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 125000000000 + (614890153 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \\ & \sin(q_4)) / 125000000000 - (7618384777 \cdot \cos(q_5)^2 \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 62500000000 - (614890153 \cdot \cos(q_2) \\ & \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_6)) / 125000000000 + (10421867 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 1953125000 + (2740951 \\ & 021 \cdot \cos(q_4) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 15625000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_5)) / 625000000 \\ & 00 - (32755927981 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 250000000000 + (10421867 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6 \\ &)) / 1953125000 + (614890153 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_6)) / 125000000000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \cos \\ & s(q_6)^2 \cdot \sin(q_4) \cdot \sin(q_5)) / 62500000000 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_5)) / 62500000000 + \\ & (614890153 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 125000000000 + (10421867 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(\\ & q_2) \cdot \sin(q_6)) / 1953125000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_6) \cdot \sin(q_5) \cdot \sin(q_6)) / 62500000000 + (32755927981 \\ & \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 250000000000 - (2740951021 \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_6) \\ &) / 15625000000 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 62500000000 - (7618384777 \cdot \cos \\ & s(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_5)) / 62500000000, (7618384777 \cdot \cos(q_2) \cdot \cos(q_4)) / 62500000000 - (7 \\ & 618384777 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_6)^2) / 62500000000 - (7618384777 \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_4)) / 62500000000 + (7 \\ & 618384777 \cdot \cos(q_3) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_4)) / 62500000000 + (614890153 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_6)) / 12 \\ & 5000000000 + (2740951021 \cdot \cos(q_3) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_6)) / 15625000000 + (10421867 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \sin(q_5) \\ &) \cdot \sin(q_6)) / 1953125000 + (32755927981 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 250000000000 - (32755927981 \cdot \sin(q_2) \\ & \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 250000000000 - (614890153 \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 125000000000 + (614890 \\ & 153 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 125000000000 + (32755927981 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \\ & \sin(q_6)) / 250000000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_4) \cdot \sin(q_6)) / 62500000000 - (10421867 \cdot \cos(\\ & q_3) \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin(q_5) \cdot \sin(q_6)) / 1953125000 - (2740951021 \cdot \cos(q_4) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 15625 \\ & 000000 - (7618384777 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 62500000000 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos \\ & s(q_5) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_6)) / 62500000000, (7618384777 \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_3)) / 62500000000 + (761838477 \\ & 7 \cdot \cos(q_2) \cdot \sin(q_4) \cdot \sin(q_5)) / 62500000000 + (10421867 \cdot \cos(q_2) \cdot \sin(q_4) \cdot \sin(q_6)) / 1953125000 + (614890153 \cdot \cos(q \\ & 4) \cdot \sin(q_2) \cdot \sin(q_6)) / 125000000000 - (10421867 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6)) / 1953125000 + (7618384777 \cdot \cos \\ & s(q_3) \cdot \cos(q_4) \cdot \sin(q_2) \cdot \sin(q_5)) / 62500000000 + (614890153 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \sin(q_4) \cdot \sin(q_6)) / 125000000000 + (1 \\ & 0421867 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \sin(q_2) \cdot \sin(q_6)) / 1953125000 + (614890153 \cdot \cos(q_2) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_5)) / 1250000 \\ & 00000 + (2740951021 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_5)) / 15625000000 + (32755927981 \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \\ & \sin(q_3)) / 250000000000 + (32755927981 \cdot \cos(q_2) \cdot \cos(q_6) \cdot \sin(q_4) \cdot \sin(q_5)) / 250000000000 + (614890153 \cdot \cos(q_5) \cdot \\ & \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 125000000000 - (2740951021 \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_4) \cdot \sin(q_6)) / 15625000000 - (6148901 \\ & 53 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_5) \cdot \cos(q_6)) / 125000000000 + (32755927981 \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin \\ & (q_5)) / 250000000000 + (10421867 \cdot \cos(q_3) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 1953125000 + (2740951021 \cdot \cos(q \\ & 4) \cdot \cos(q_5) \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 15625000000, 0; \\ & (80248811 \cdot \cos(q_3)^2 \cdot \sin(q_2) \cdot \sin(q_4)) / 3906250000 - (8538821 \cdot \cos(q_2) \cdot \cos(q_3)) / 488281250 - (4734679849 \cdot \cos(q \\ & 2) \cdot \cos(q_4)) / 500000000000 - (1915553 \cdot \sin(q_2) \cdot \sin(q_3)) / 3906250000 - (80248811 \cdot \sin(q_2) \cdot \sin(q_4)) / 7812500000 - (\\ & 133244479 \cdot \cos(q_2)) / 6250000000 - (80248811 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4)) / 7812500000 - (614890153 \cdot \cos(q_2) \cdot \cos(q \\ & 4) \cdot \cos(q_6)) / 125000000000 + (114870848333 \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_3)) / 1000000000000 - (21105437293 \cdot \cos(q_2) \cdot \sin \\ & (q_3) \cdot \sin(q_4)) / 62500000000 + (4734679849 \cdot \cos(q_3) \cdot \sin(q_2) \cdot \sin(q_4)) / 500000000000 - (10421867 \cdot \cos(q_6) \cdot \sin(q_2) \\ &) \cdot \sin(q_4)) / 1953125000 - (237258851293 \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 1000000000000 + (7618384777 \cdot \cos(\\ & q_3) \cdot \cos(q_5)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 62500000000 + (7618384777 \cdot \cos(q_3) \cdot \cos(q_6)^2 \cdot \sin(q_2) \cdot \sin(q_3)) / 31250000000 + \\ & (10421867 \cdot \cos(q_3)^2 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 976562500 - (10421867 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \cos(q_4) \cdot \cos(q_6)) / 19531 \\ & 25000 - (237258851293 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \sin(q_3) \cdot \sin(q_4)) / 1000000000000 + (32755927981 \cdot \cos(q_3) \cdot \cos(q_6) \cdot \sin(\\ & q_2) \cdot \sin(q_3)) / 125000000000 - (2740951021 \cdot \cos(q_2) \cdot \cos(q_6) \cdot \sin(q_3) \cdot \sin(q_4)) / 15625000000 + (614890153 \cdot \cos(q_3) \\ & \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_4)) / 125000000000 - (2740951021 \cdot \cos(q_2) \cdot \cos(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 15625000000 + (32755 \\ & 927981 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_3) \cdot \sin(q_6)) / 250000000000 - (7618384777 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_5)) / 625000 \\ & 00000 + (614890153 \cdot \cos(q_2) \cdot \cos(q_5) \cdot \sin(q_4) \cdot \sin(q_6)) / 125000000000 - (10421867 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q \\ & 6)) / 1953125000 - (614890153 \cdot \sin(q_2) \cdot \sin(q_3) \cdot \sin(q_5) \cdot \sin(q_6)) / 125000000000 - (32755927981 \cdot \sin(q_2) \cdot \sin(q_4) \cdot \sin \\ & (q_5) \cdot \sin(q_6)) / 250000000000 + (7618384777 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_5)^2 \cdot \sin(q_3) \cdot \sin(q_4)) / 62500000000 - (32755 \\ & 927981 \cdot \cos(q_3) \cdot \cos(q_4)^2 \cdot \cos(q_6) \cdot \sin(q_2) \cdot \sin(q_3)) / 125000000000 - (7618384777 \cdot \cos(q_2) \cdot \cos(q_4) \cdot \cos(q_6)^2 \cdot \sin \\ & (q_3) \cdot \sin(q_4)) / 62500000000 + (7618384777 \cdot \cos(q_3)^2 \cdot \cos(q_4) \cdot \cos(q_5) \cdot \sin(q_2) \cdot \sin(q_5)) / 31250000000 - (327559
\end{aligned}$$

27981*cos(q2)*cos(q4)^2*cos(q5)*sin(q3)*sin(q6))/125000000000 + (10421867*cos(q3)^2*cos(q4)*cos(q5)*sin(q2)*sin(q6))/976562500 + (7618384777*cos(q4)*cos(q5)*cos(q6)^2*sin(q2)*sin(q5))/62500000000 + (32755927981*cos(q3)^2*sin(q2)*sin(q4)*sin(q5)*sin(q6))/125000000000 + (7618384777*cos(q3)*cos(q4)^2*cos(q5)^2*sin(q2)*sin(q3))/62500000000 - (7618384777*cos(q3)*cos(q4)^2*cos(q6)^2*sin(q2)*sin(q3))/62500000000 - (7618384777*cos(q3)*cos(q5)^2*cos(q6)^2*sin(q2)*sin(q3))/62500000000 + (7618384777*cos(q2)*cos(q3)*cos(q5)*sin(q4)*sin(q5))/62500000000 - (32755927981*cos(q2)*cos(q4)*cos(q6)*sin(q3)*sin(q4))/125000000000 - (32755927981*cos(q2)*cos(q3)*cos(q4)*sin(q5)*sin(q6))/250000000000 + (10421867*cos(q2)*cos(q3)*cos(q5)*sin(q4)*sin(q6))/1953125000 - (2740951021*cos(q2)*cos(q4)*cos(q5)*sin(q3)*sin(q6))/15625000000 + (614890153*cos(q3)*cos(q4)*cos(q5)*sin(q2)*sin(q6))/125000000000 + (7618384777*cos(q2)*cos(q5)*cos(q6)*sin(q3)*sin(q6))/62500000000 - (10421867*cos(q3)*sin(q2)*sin(q3)*sin(q5)*sin(q6))/976562500 - (7618384777*cos(q6)*sin(q2)*sin(q4)*sin(q5)*sin(q6))/62500000000 - (7618384777*cos(q2)*cos(q4)*cos(q5)^2*cos(q6)^2*sin(q3)*sin(q4))/62500000000 - (7618384777*cos(q3)^2*cos(q4)*cos(q5)*cos(q6)^2*sin(q2)*sin(q5))/31250000000 - (7618384777*cos(q2)*cos(q3)*cos(q4)*cos(q6)*sin(q5)*sin(q6))/62500000000 - (7618384777*cos(q3)*cos(q4)^2*cos(q5)^2*cos(q6)^2*sin(q2)*sin(q3))/62500000000 - (7618384777*cos(q2)*cos(q3)*cos(q5)*cos(q6)^2*sin(q4)*sin(q5))/62500000000 - (7618384777*cos(q2)*cos(q4)^2*cos(q5)*cos(q6)*sin(q3)*sin(q6))/31250000000 + (7618384777*cos(q3)^2*cos(q6)*sin(q2)*sin(q4)*sin(q5)*sin(q6))/31250000000 + (32755927981*cos(q3)*cos(q4)*cos(q5)*sin(q2)*sin(q3)*sin(q4)*sin(q6))/125000000000 + (7618384777*cos(q3)*cos(q4)*cos(q5)*cos(q6)*sin(q2)*sin(q3)*sin(q4)*sin(q6))/312500000000, (21105437293*cos(q4))/31250000000 + (2740951021*cos(q4)*cos(q6))/7812500000 + (10421867*sin(q5)*sin(q6))/976562500 + (114870848333*cos(q3)^2)/1000000000000 + (237258851293*cos(q4)^2)/1000000000000 - (7618384777*cos(q6)^2)/62500000000 + (32755927981*cos(q3)^2*cos(q6))/125000000000 + (32755927981*cos(q4)^2*cos(q6))/125000000000 - (237258851293*cos(q3)^2*cos(q4)^2)/1000000000000 + (7618384777*cos(q3)^2*cos(q5)^2)/62500000000 + (7618384777*cos(q3)^2*cos(q6)^2)/31250000000 - (7618384777*cos(q4)^2*cos(q5)^2)/62500000000 + (7618384777*cos(q4)^2*cos(q6)^2)/62500000000 - (10421867*cos(q3)^2*sin(q5)*sin(q6))/976562500 - (32755927981*cos(q3)^2*cos(q4)^2*cos(q6))/125000000000 + (7618384777*cos(q3)^2*cos(q4)^2*cos(q6)^2)/62500000000 - (7618384777*cos(q3)^2*cos(q5)^2*cos(q6)^2)/62500000000 + (7618384777*cos(q4)^2*cos(q5)^2*cos(q6)^2)/62500000000 - (80248811*cos(q3)*sin(q3)*sin(q4))/3906250000 - (2740951021*cos(q5)*sin(q4)*sin(q6))/7812500000 - (7618384777*cos(q3)^2*cos(q4)^2*cos(q5)^2*cos(q6)^2)/62500000000 - (10421867*cos(q3)*cos(q6)*sin(q3)*sin(q4))/976562500 - (32755927981*cos(q4)*cos(q5)*sin(q4)*sin(q6))/125000000000 + (32755927981*cos(q3)^2*cos(q4)*cos(q5)*sin(q4)*sin(q6))/125000000000 - (7618384777*cos(q3)*cos(q4)*cos(q5)*sin(q3)*sin(q5))/31250000000 - (10421867*cos(q3)*cos(q4)*cos(q5)*sin(q3)*sin(q6))/976562500 - (7618384777*cos(q4)*cos(q5)*cos(q6)*sin(q4)*sin(q6))/31250000000 - (32755927981*cos(q3)*sin(q3)*sin(q4)*sin(q5)*sin(q6))/125000000000 - (7618384777*cos(q3)*cos(q6)*sin(q3)*sin(q4)*sin(q5)*sin(q6))/31250000000 + (7618384777*cos(q3)*cos(q4)*cos(q5)*cos(q6)^2*sin(q3)*sin(q5))/31250000000 + (7618384777*cos(q3)^2*cos(q4)*cos(q5)*cos(q6)*sin(q4)*sin(q6))/31250000000 + 51946184489/62500000000, (32755927981*cos(q5)*sin(q3)*sin(q6))/250000000000 - (80248811*cos(q3)*cos(q4))/7812500000 - (21105437293*sin(q3)*sin(q4))/62500000000 - (10421867*cos(q3)*cos(q4)*cos(q6))/1953125000 - (237258851293*cos(q4)*sin(q3)*sin(q4))/1000000000000 - (2740951021*cos(q6)*sin(q3)*sin(q4))/15625000000 - (2740951021*cos(q3)*sin(q5)*sin(q6))/15625000000 - (8538821*cos(q3))/488281250 + (7618384777*cos(q4)*cos(q5)^2*sin(q3)*sin(q4))/62500000000 - (7618384777*cos(q4)*cos(q6)^2*sin(q3)*sin(q4))/62500000000 - (32755927981*cos(q4)^2*cos(q5)*sin(q3)*sin(q6))/125000000000 + (7618384777*cos(q3)*cos(q5)*sin(q4)*sin(q5))/62500000000 - (32755927981*cos(q4)*cos(q6)*sin(q3)*sin(q4))/125000000000 - (32755927981*cos(q3)*cos(q4)*sin(q5)*sin(q6))/250000000000 + (10421867*cos(q3)*cos(q5)*sin(q4)*sin(q6))/1953125000 - (2740951021*cos(q4)*cos(q5)*sin(q3)*sin(q6))/15625000000 + (7618384777*cos(q5)*cos(q6)*sin(q3)*sin(q6))/62500000000 - (7618384777*cos(q3)*cos(q5)*cos(q6)^2*sin(q4)*sin(q5))/62500000000 - (7618384777*cos(q4)^2*cos(q5)*cos(q6)*sin(q3)*sin(q6))/31250000000 - (7618384777*cos(q4)*cos(q5)^2*cos(q6)^2*sin(q3)*sin(q4))/62500000000 - (7618384777*cos(q3)*cos(q4)*cos(q6)*sin(q5)*sin(q6))/62500000000, (237258851293*cos(q3))/1000000000000 + (21105437293*cos(q3)*cos(q4))/62500000000 + (32755927981*cos(q3)*cos(q6))/125000000000 - (80248811*sin(q3)*sin(q4))/7812500000 + (7618384777*cos(q3)*cos(q5)^2)/62500000000 + (7618384777*cos(q3)*cos(q6)^2)/62500000000 - (7618384777*cos(q3)*cos(q5)^2*cos(q6)^2)/62500000000 + (2740951021*cos(q3)*cos(q4)*cos(q6))/15625000000 - (10421867*cos(q6)*sin(q3)*sin(q4))/1953125000 - (7618384777*cos(q4)*cos(q5)*sin(q3)*sin(q5))/62500000000 - (2740951021*cos(q3)*cos(q5)*sin(q4)*sin(q6))/15625000000 - (10421867*cos(q4)*cos(q5)*sin(q3)*sin(q6))/1953125000 - (32755927981*sin(q3)*sin(q4)*sin(q5)*sin(q6))/250000000000 + (7618384777*cos(q4)*cos(q5)*cos(q6)^2*sin(q3)*sin(q5))/62500000000 - (7618384777*cos(q6)*sin(q3)*sin(q4)*sin(q5)*sin(q6))/62500000000, (7618384777*sin(q3)*sin(q4))/62500000000 - (7618384777*cos(q6)^2*sin(q3)*sin(q4))/62500000000 - (32755927981*cos(q3)*si

$$\begin{aligned} & n(q5)*\sin(q6))/250000000000 - (2740951021*\cos(q5)*\sin(q3)*\sin(q6))/15625000000 - (2740951021*\cos(q3)*\cos(q4)*\sin(q5)*\sin(q6))/15625000000 - (32755927981*\cos(q4)*\cos(q5)*\sin(q3)*\sin(q6))/250000000000 - (7618384777*\cos(q3)*\cos(q6)*\sin(q5)*\sin(q6))/62500000000 + (10421867*\sin(q3)*\sin(q4)*\sin(q5)*\sin(q6))/1953125000 - (7618384777*\cos(q4)*\cos(q5)*\cos(q6)*\sin(q3)*\sin(q6))/62500000000, (7618384777*\cos(q3)*\cos(q5))/62500000000 \\ & + (32755927981*\cos(q3)*\cos(q5)*\cos(q6))/250000000000 - (7618384777*\cos(q4)*\sin(q3)*\sin(q5))/62500000000 - (2740951021*\cos(q3)*\sin(q4)*\sin(q6))/15625000000 - (10421867*\cos(q4)*\sin(q3)*\sin(q6))/1953125000 - (2740951021*\cos(q6)*\sin(q3)*\sin(q5))/15625000000 + (2740951021*\cos(q3)*\cos(q4)*\cos(q5)*\cos(q6))/15625000000 - (32755927981*\cos(q4)*\cos(q6)*\sin(q3)*\sin(q5))/250000000000 - (10421867*\cos(q5)*\cos(q6)*\sin(q3)*\sin(q4))/1953125000,0; \\ & (359646854253*\cos(q2))/1000000000000 + (1915553*\cos(q2)*\cos(q3))/3906250000 + (32755927981*\cos(q2)*\cos(q6))/125000000000 - (8538821*\sin(q2)*\sin(q3))/488281250 - (237258851293*\cos(q2)*\cos(q4)^2)/1000000000000 - (7618384777*\cos(q2)*\cos(q5)^2)/62500000000 - (32755927981*\cos(q2)*\cos(q4)^2*\cos(q6))/125000000000 + (7618384777*\cos(q2)*\cos(q4)^2*\cos(q5)^2)/62500000000 - (7618384777*\cos(q2)*\cos(q4)^2*\cos(q6)^2)/62500000000 + (7618384777*\cos(q2)*\cos(q5)^2*\cos(q6)^2)/62500000000 + (4734679849*\cos(q2)*\sin(q3)*\sin(q4))/50000000000 + (21105437293*\cos(q3)*\sin(q2)*\sin(q4))/62500000000 - (80248811*\cos(q4)*\sin(q2)*\sin(q3))/781250000 + (10421867*\cos(q2)*\sin(q5)*\sin(q6))/976562500 - (7618384777*\cos(q2)*\cos(q4)^2*\cos(q5)^2*\cos(q6)^2)/62500000000 + (237258851293*\cos(q3)*\cos(q4)*\sin(q2)*\sin(q4))/1000000000000 + (614890153*\cos(q2)*\cos(q6)*\sin(q3)*\sin(q4))/125000000000 + (2740951021*\cos(q3)*\cos(q6)*\sin(q2)*\sin(q4))/15625000000 - (10421867*\cos(q4)*\cos(q6)*\sin(q2)*\sin(q3))/1953125000 + (614890153*\cos(q2)*\cos(q3)*\sin(q5)*\sin(q6))/125000000000 - (32755927981*\cos(q3)*\cos(q5)*\sin(q2)*\sin(q6))/250000000000 - (2740951021*\sin(q2)*\sin(q3)*\sin(q5)*\sin(q6))/15625000000 - (7618384777*\cos(q3)*\cos(q4)*\cos(q5)^2*\sin(q2)*\sin(q4))/62500000000 + (7618384777*\cos(q3)*\cos(q4)*\cos(q6)^2*\sin(q2)*\sin(q4))/62500000000 + (32755927981*\cos(q3)*\cos(q4)^2*\cos(q5)*\sin(q2)*\sin(q6))/125000000000 + (32755927981*\cos(q3)*\cos(q4)*\cos(q6)*\sin(q2)*\sin(q4))/125000000000 + (614890153*\cos(q2)*\cos(q4)*\cos(q5)*\sin(q3)*\sin(q6))/125000000000 + (2740951021*\cos(q3)*\cos(q4)*\cos(q5)*\sin(q2)*\sin(q6))/15625000000 + (32755927981*\cos(q2)*\cos(q4)*\cos(q5)*\sin(q4)*\sin(q6))/125000000000 - (7618384777*\cos(q3)*\cos(q5)*\cos(q6)*\sin(q2)*\sin(q6))/62500000000 + (7618384777*\cos(q5)*\sin(q2)*\sin(q3)*\sin(q4)*\sin(q5))/62500000000 - (32755927981*\cos(q4)*\sin(q2)*\sin(q3)*\sin(q5)*\sin(q6))/250000000000 + (10421867*\cos(q5)*\sin(q2)*\sin(q3)*\sin(q4)*\sin(q6))/1953125000 + (7618384777*\cos(q3)*\cos(q4)*\cos(q5)^2*\cos(q6)^2*\sin(q2)*\sin(q4))/62500000000 + (7618384777*\cos(q2)*\cos(q4)*\cos(q5)*\cos(q6)*\sin(q4)*\sin(q6))/31250000000 - (7618384777*\cos(q4)*\cos(q6)*\sin(q2)*\sin(q3)*\sin(q5)*\sin(q6))/62500000000 + (7618384777*\cos(q3)*\cos(q4)^2*\cos(q5)*\cos(q6)*\sin(q2)*\sin(q6))/31250000000 - (7618384777*\cos(q5)*\cos(q6)^2*\sin(q2)*\sin(q3)*\sin(q4)*\sin(q5))/62500000000, (32755927981*\cos(q5)*\sin(q3)*\sin(q6))/250000000000 - (80248811*\cos(q3)*\cos(q4))/7812500000 - (21105437293*\sin(q3)*\sin(q4))/62500000000 - (10421867*\cos(q3)*\cos(q4)*\cos(q6))/1953125000 - (237258851293*\cos(q4)*\sin(q3)*\sin(q4))/100000000000 - (2740951021*\cos(q6)*\sin(q3)*\sin(q4))/15625000000 - (2740951021*\cos(q3)*\sin(q5)*\sin(q6))/15625000000 - (8538821*\cos(q3))/488281250 + (7618384777*\cos(q4)*\cos(q5)^2*\sin(q3)*\sin(q4))/62500000000 - (7618384777*\cos(q4)*\cos(q6)^2*\sin(q3)*\sin(q4))/62500000000 - (32755927981*\cos(q4)^2*\cos(q5)*\sin(q3)*\sin(q6))/12500000000 + (7618384777*\cos(q3)*\cos(q5)*\sin(q4)*\sin(q5))/62500000000 - (32755927981*\cos(q4)*\cos(q6)*\sin(q3)*\sin(q4))/125000000000 - (32755927981*\cos(q3)*\cos(q4)*\sin(q5)*\sin(q6))/250000000000 + (10421867*\cos(q3)*\cos(q5)*\sin(q4)*\sin(q6))/1953125000 - (2740951021*\cos(q4)*\cos(q5)*\sin(q3)*\sin(q6))/15625000000 + (7618384777*\cos(q5)*\cos(q6)*\sin(q3)*\sin(q6))/62500000000 - (7618384777*\cos(q3)*\cos(q5)*\cos(q6)^2*\sin(q4)*\sin(q5))/62500000000 - (7618384777*\cos(q4)^2*\cos(q5)*\cos(q6)*\sin(q3)*\sin(q6))/31250000000 - (7618384777*\cos(q4)*\cos(q5)^2*\cos(q6)^2*\sin(q3)*\sin(q4))/62500000000 - (7618384777*\cos(q3)*\cos(q4)*\cos(q6)*\sin(q5)*\sin(q6))/62500000000, (32755927981*\cos(q6))/125000000000 + (10421867*\sin(q5)*\sin(q6))/976562500 - (237258851293*\cos(q4)^2)/1000000000000 - (7618384777*\cos(q5)^2)/62500000000 - (32755927981*\cos(q4)^2*\cos(q6))/125000000000 + (7618384777*\cos(q4)^2*\cos(q5)^2)/62500000000 - (7618384777*\cos(q4)^2*\cos(q6)^2)/62500000000 + (7618384777*\cos(q5)^2*\cos(q6)^2)/62500000000 - (7618384777*\cos(q4)^2*\cos(q5)^2*\cos(q6)^2)/62500000000 + (32755927981*\cos(q4)*\cos(q5)*\sin(q4)*\sin(q6))/125000000000 + (7618384777*\cos(q4)*\cos(q5)*\cos(q6)*\sin(q4)*\sin(q6))/31250000000 + 359646854253/1000000000000, (7618384777*\cos(q5)*\sin(q4)*\sin(q5))/62500000000 - (10421867*\cos(q4)*\cos(q6))/1953125000 - (80248811*\cos(q4))/7812500000 - (32755927981*\cos(q4)*\sin(q5)*\sin(q6))/25000000000 + (10421867*\cos(q5)*\sin(q4)*\sin(q6))/1953125000 - (7618384777*\cos(q5)*\cos(q6)^2*\sin(q4)*\sin(q5))/62500000000 - (7618384777*\cos(q4)*\cos(q6)*\sin(q5)*\sin(q6))/62500000000, (7618384777*\cos(q4))/62500000000 - (7618384777*\cos(q4)*\cos(q6)^2)/62500000000 + (10421867*\cos(q4)*\sin(q5)*\sin(q6))/1953125000 + (32755927981*\cos(q5)*\sin(q4)*\sin(q6))/250000000000 + (7618384777*\cos(q5)*\cos(q6)*\sin(q4)*\sin(q6))/62500000000, (7618384777*\sin(q4)*\sin(q5))/62500000000 + (10421867*\sin(q4)*\sin(q6))/1953125000 - (10421867*\cos(q4)*\cos(q5))
\end{aligned}$$

*cos(q6))/1953125000 + (32755927981*cos(q6)*sin(q4)*sin(q5))/250000000000,0;
(237258851293*sin(q2)*sin(q3))/1000000000000 - (80248811*cos(q2)*cos(q4))/7812500000 + (4734679849*sin(q2)*sin(q4))/500000000000 + (7618384777*cos(q5)^2*sin(q2)*sin(q3))/62500000000 + (7618384777*cos(q6)^2*sin(q2)*sin(q3))/62500000000 - (4734679849*cos(q2)*cos(q3)*cos(q4))/500000000000 - (10421867*cos(q2)*cos(q4)*cos(q6))/1953125000 + (80248811*cos(q3)*sin(q2)*sin(q4))/7812500000 + (21105437293*cos(q4)*sin(q2)*sin(q3))/62500000000 + (32755927981*cos(q6)*sin(q2)*sin(q3))/125000000000 + (614890153*cos(q6)*sin(q2)*sin(q4))/125000000000 - (7618384777*cos(q5)^2*cos(q6)^2*sin(q2)*sin(q3))/62500000000 - (614890153*cos(q2)*cos(q3)*cos(q4)*cos(q6))/125000000000 + (10421867*cos(q3)*cos(q6)*sin(q2)*sin(q4))/1953125000 + (2740951021*cos(q4)*cos(q6)*sin(q2)*sin(q3))/15625000000 + (7618384777*cos(q2)*cos(q5)*sin(q4)*sin(q5))/62500000000 - (32755927981*cos(q2)*cos(q4)*sin(q5)*sin(q6))/250000000000 + (10421867*cos(q2)*cos(q5)*sin(q4)*sin(q6))/1953125000 + (614890153*cos(q4)*cos(q5)*sin(q2)*sin(q6))/125000000000 - (7618384777*cos(q2)*cos(q5)*cos(q6)^2*sin(q4)*sin(q5))/62500000000 + (7618384777*cos(q3)*cos(q4)*cos(q5)*sin(q2)*sin(q5))/62500000000 + (614890153*cos(q2)*cos(q3)*cos(q5)*sin(q4)*sin(q6))/125000000000 + (10421867*cos(q3)*cos(q4)*cos(q5)*sin(q2)*sin(q6))/1953125000 - (7618384777*cos(q2)*cos(q4)*cos(q6)*sin(q5)*sin(q6))/62500000000 + (32755927981*cos(q3)*sin(q2)*sin(q4)*sin(q5)*sin(q6))/250000000000 - (2740951021*cos(q5)*sin(q2)*sin(q3)*sin(q4)*sin(q6))/15625000000 + (7618384777*cos(q3)*cos(q6)*sin(q2)*sin(q4)*sin(q5)*sin(q6))/62500000000 - (7618384777*cos(q3)*cos(q4)*cos(q5)*cos(q6)^2*sin(q2)*sin(q5))/62500000000,(237258851293*cos(q3))/1000000000000 + (21105437293*cos(q3)*cos(q4))/625000000000 + (32755927981*cos(q3)*cos(q6))/125000000000 - (80248811*sin(q3)*sin(q4))/7812500000 + (7618384777*cos(q3)*cos(q5)^2)/62500000000 + (7618384777*cos(q3)*cos(q6)^2)/62500000000 - (7618384777*cos(q3)*cos(q5)^2*cos(q6)^2)/62500000000 + (2740951021*cos(q3)*cos(q4)*cos(q6))/15625000000 - (10421867*cos(q6)*sin(q3)*sin(q4))/1953125000 - (7618384777*cos(q4)*cos(q5)*sin(q3)*sin(q5))/62500000000 - (2740951021*cos(q3)*cos(q5)*sin(q4)*sin(q6))/15625000000 - (10421867*cos(q4)*cos(q5)*sin(q3)*sin(q6))/1953125000 - (32755927981*sin(q3)*sin(q4)*sin(q5)*sin(q6))/250000000000 + (7618384777*cos(q4)*cos(q5)*cos(q6)^2*sin(q3)*sin(q5))/62500000000 - (7618384777*cos(q6)*sin(q3)*sin(q4)*sin(q5)*sin(q6))/62500000000,(7618384777*cos(q5)*sin(q4)*sin(q5))/62500000000 - (10421867*cos(q4)*cos(q6))/1953125000 - (80248811*cos(q4))/7812500000 - (32755927981*cos(q4)*sin(q5)*sin(q6))/250000000000 + (10421867*cos(q5)*sin(q4)*sin(q6))/1953125000 - (7618384777*cos(q5)*cos(q6)^2*sin(q4)*sin(q5))/62500000000 - (7618384777*cos(q4)*cos(q6)*sin(q5)*sin(q6))/62500000000,(32755927981*cos(q6))/125000000000 + (7618384777*cos(q5)^2)/62500000000 + (7618384777*cos(q6)^2)/62500000000 - (7618384777*cos(q5)^2*cos(q6)^2)/62500000000 + 237258851293/100000000000,-(10421867*sin(q5)*sin(q6)*(2924*cos(q6) + 3143))/250000000000,(10421867*cos(q5)*(3143*cos(q6) + 2924))/250000000000,0;
(7618384777*cos(q2)*cos(q4))/62500000000 - (7618384777*cos(q2)*cos(q4)*cos(q6)^2)/62500000000 - (7618384777*cos(q3)*sin(q2)*sin(q4))/62500000000 + (7618384777*cos(q3)*cos(q6)^2*sin(q2)*sin(q4))/62500000000 + (614890153*cos(q2)*cos(q5)*sin(q3)*sin(q6))/125000000000 + (2740951021*cos(q3)*cos(q5)*sin(q2)*sin(q6))/15625000000 + (10421867*cos(q2)*cos(q4)*sin(q5)*sin(q6))/1953125000 + (32755927981*cos(q2)*cos(q5)*sin(q4)*sin(q6))/250000000000 - (32755927981*sin(q2)*sin(q3)*sin(q5)*sin(q6))/250000000000 - (614890153*sin(q2)*sin(q4)*sin(q5)*sin(q6))/125000000000 + (614890153*cos(q2)*cos(q3)*cos(q4)*sin(q5)*sin(q6))/125000000000 + (32755927981*cos(q3)*cos(q4)*cos(q5)*sin(q2)*sin(q6))/250000000000 + (7618384777*cos(q2)*cos(q5)*cos(q6)*sin(q4)*sin(q6))/62500000000 - (10421867*cos(q3)*sin(q2)*sin(q4)*sin(q5)*sin(q6))/1953125000 - (2740951021*cos(q4)*sin(q2)*sin(q3)*sin(q5)*sin(q6))/15625000000 - (7618384777*cos(q6)*sin(q2)*sin(q3)*sin(q5)*sin(q6))/62500000000 + (7618384777*cos(q3)*cos(q4)*cos(q5)*cos(q6)*sin(q2)*sin(q6))/62500000000,(7618384777*sin(q3)*sin(q4))/62500000000 - (7618384777*cos(q6)^2*sin(q3)*sin(q4))/62500000000 - (32755927981*cos(q3)*sin(q5)*sin(q6))/250000000000 - (2740951021*cos(q5)*sin(q3)*sin(q6))/15625000000 - (2740951021*cos(q3)*cos(q4)*sin(q5)*sin(q6))/15625000000 - (32755927981*cos(q4)*cos(q5)*sin(q3)*sin(q6))/250000000000 - (7618384777*cos(q3)*cos(q6)*sin(q5)*sin(q6))/62500000000 + (10421867*sin(q3)*sin(q4)*sin(q5)*sin(q6))/1953125000 - (7618384777*cos(q4)*cos(q5)*cos(q6)*sin(q3)*sin(q6))/62500000000,(7618384777*cos(q4))/62500000000 - (7618384777*cos(q4)*cos(q6)^2)/62500000000 + (10421867*cos(q4)*sin(q5)*sin(q6))/1953125000 + (32755927981*cos(q5)*sin(q4)*sin(q6))/250000000000 + (7618384777*cos(q5)*cos(q6)*sin(q4)*sin(q6))/62500000000,-(10421867*sin(q5)*sin(q6)*(2924*cos(q6) + 3143))/250000000000,(7618384777*sin(q6)^2)/62500000000,0,0;
(7618384777*cos(q5)*sin(q2)*sin(q3))/62500000000 + (7618384777*cos(q2)*sin(q4)*sin(q5))/62500000000 + (10421867*cos(q2)*sin(q4)*sin(q6))/1953125000 + (614890153*cos(q4)*sin(q2)*sin(q6))/125000000000 - (10421867*cos(q2)*cos(q4)*cos(q5)*cos(q6))/1953125000 + (7618384777*cos(q3)*cos(q4)*sin(q2)*sin(q5))/62500000000 + (614890153*cos(q2)*cos(q3)*sin(q4)*sin(q6))/125000000000 + (10421867*cos(q3)*cos(q4)*sin(q2)*sin(q6))/1953125000 + (614890153*cos(q2)*cos(q6)*sin(q3)*sin(q5))/125000000000 + (2740951021*cos(q3)*cos(q6)*sin(q2)

*sin(q5))/15625000000 + (32755927981*cos(q5)*cos(q6)*sin(q2)*sin(q3))/2500000000000 + (32755927981*cos(q2)*cos(q6)*sin(q4)*sin(q5))/2500000000000 + (614890153*cos(q5)*cos(q6)*sin(q2)*sin(q4))/1250000000000 - (2740951021*sin(q2)*sin(q3)*sin(q4)*sin(q6))/15625000000 - (614890153*cos(q2)*cos(q3)*cos(q4)*cos(q5)*cos(q6))/1250000000000 + (32755927981*cos(q3)*cos(q4)*cos(q6)*sin(q2)*sin(q5))/2500000000000 + (10421867*cos(q3)*cos(q5)*cos(q6)*sin(q2)*sin(q4))/1953125000 + (2740951021*cos(q4)*cos(q5)*cos(q6)*sin(q2)*sin(q3))/15625000000,(7618384777*cos(q3)*cos(q5))/625000000000 + (32755927981*cos(q3)*cos(q5)*cos(q6))/2500000000000 - (7618384777*cos(q4)*sin(q3)*sin(q5))/625000000000 - (2740951021*cos(q3)*sin(q4)*sin(q6))/15625000000 - (10421867*cos(q4)*sin(q3)*sin(q6))/1953125000 - (2740951021*cos(q6)*sin(q3)*sin(q5))/15625000000 + (2740951021*cos(q3)*cos(q4)*cos(q5)*cos(q6))/15625000000 - (32755927981*cos(q4)*cos(q6)*sin(q3)*sin(q5))/2500000000000 - (10421867*cos(q5)*cos(q6)*sin(q3)*sin(q4))/1953125000,(7618384777*sin(q4)*sin(q5))/625000000000 + (10421867*sin(q4)*sin(q6))/1953125000 - (10421867*cos(q4)*cos(q5)*cos(q6))/1953125000 + (32755927981*cos(q6)*sin(q4)*sin(q5))/2500000000000,(10421867*cos(q5)*(3143*cos(q6) + 2924))/2500000000000,0,7618384777/6250000000,0;
0,0,0,0,0,0;
]