

Behold the beauty of the Octonion Work-Force Action Function and its integrable equivalent form.

Define the negative of the Octonion extension of the D'Alembertian as the scalar operator form that follows sticking to the intrinsic variables r hence D operators

$$-D^2 = D_0^2 - D_1^2 - D_2^2 - D_3^2 - D_4^2 - D_5^2 - D_6^2 - D_7^2$$

The generating potential functions are $A_i(r)$ u_i sum i .

Take the Octonion extension to the Lorentz Condition as

$$LC = D_0(A_0) + D_1(A_1) + D_2(A_2) + D_3(A_3) + D_4(A_4) + D_5(A_5) + D_6(A_6) + D_7(A_7)$$

The Octonion 8-Current Density is then

$$j_i u_i = -D^2(A_i) u_i + D_i(LC) u_i \quad \text{sum } i$$

The Action Function Invariant($F * j$) =

[0]

$$\begin{aligned} & -j_1 [D_0(A_1) + D_1(A_0)] \\ & -j_2 [D_0(A_2) + D_2(A_0)] \\ & -j_3 [D_0(A_3) + D_3(A_0)] \\ & -j_4 [D_0(A_4) + D_4(A_0)] \\ & -j_5 [D_0(A_5) + D_5(A_0)] \\ & -j_6 [D_0(A_6) + D_6(A_0)] \\ & -j_7 [D_0(A_7) + D_7(A_0)] \end{aligned}$$

[1]

$$\begin{aligned} & +j_0 [D_0(A_1) + D_1(A_0)] \\ & -j_2 [D_1(A_2) - D_2(A_1)] + j_3 [D_3(A_1) - D_1(A_3)] \\ & -j_4 [D_1(A_4) - D_4(A_1)] + j_5 [D_5(A_1) - D_1(A_5)] \\ & -j_7 [D_1(A_7) - D_7(A_1)] + j_6 [D_6(A_1) - D_1(A_6)] \end{aligned}$$

[2]

$$\begin{aligned} & +j_0 [D_0(A_2) + D_2(A_0)] \\ & -j_3 [D_2(A_3) - D_3(A_2)] + j_1 [D_1(A_2) - D_2(A_1)] \\ & -j_4 [D_2(A_4) - D_4(A_2)] + j_6 [D_6(A_2) - D_2(A_6)] \\ & -j_5 [D_2(A_5) - D_5(A_2)] + j_7 [D_7(A_2) - D_2(A_7)] \end{aligned}$$

[3]

$$\begin{aligned} & +j_0 [D_0(A_3) + D_3(A_0)] \\ & -j_1 [D_3(A_1) - D_1(A_3)] + j_2 [D_2(A_3) - D_3(A_2)] \\ & -j_4 [D_3(A_4) - D_4(A_3)] + j_7 [D_7(A_3) - D_3(A_7)] \\ & -j_6 [D_3(A_6) - D_6(A_3)] + j_5 [D_5(A_3) - D_3(A_5)] \end{aligned}$$

[4]

$$\begin{aligned} & +j_0 [D_0(A_4) + D_4(A_0)] \\ & -j_5 [D_4(A_5) - D_5(A_4)] + j_1 [D_1(A_4) - D_4(A_1)] \\ & -j_6 [D_4(A_6) - D_6(A_4)] + j_2 [D_2(A_4) - D_4(A_2)] \\ & -j_7 [D_4(A_7) - D_7(A_4)] + j_3 [D_3(A_4) - D_4(A_3)] \end{aligned}$$

[5]

$$+j_0 [D_0(A_5) + D_5(A_0)]$$

$$\begin{aligned}
& -j1 [D5(A1)-D1(A5)] + j4 [D4(A5)-D5(A4)] \\
& -j3 [D5(A3)-D3(A5)] + j6 [D6(A5)-D5(A6)] \\
& -j7 [D5(A7)-D7(A5)] + j2 [D2(A5)-D5(A2)]
\end{aligned}$$

[6]

$$\begin{aligned}
& +j0 [D0(A6)+D6(A0)] \\
& -j1 [D6(A1)-D1(A6)] + j7 [D7(A6)-D6(A7)] \\
& -j2 [D6(A2)-D2(A6)] + j4 [D4(A6)-D6(A4)] \\
& -j5 [D6(A5)-D5(A6)] + j3 [D3(A6)-D6(A3)]
\end{aligned}$$

[7]

$$\begin{aligned}
& +j0 [D0(A7)+D7(A0)] \\
& -j2 [D7(A2)-D2(A7)] + j5 [D5(A7)-D7(A5)] \\
& -j3 [D7(A3)-D3(A7)] + j4 [D4(A7)-D7(A4)] \\
& -j6 [D7(A6)-D6(A7)] + j1 [D1(A7)-D7(A1)]
\end{aligned}$$

Its integrable equivalent is

[0]

$$\begin{aligned}
& -1/2 D0 \{ [D0(A1)+D1(A0)][D0(A1)+D1(A0)] \} \\
& -1/2 D0 \{ [D0(A2)+D2(A0)][D0(A2)+D2(A0)] \} \\
& -1/2 D0 \{ [D0(A3)+D3(A0)][D0(A3)+D3(A0)] \} \\
& -1/2 D0 \{ [D0(A4)+D4(A0)][D0(A4)+D4(A0)] \} \\
& -1/2 D0 \{ [D0(A5)+D5(A0)][D0(A5)+D5(A0)] \} \\
& -1/2 D0 \{ [D0(A6)+D6(A0)][D0(A6)+D6(A0)] \} \\
& -1/2 D0 \{ [D0(A7)+D7(A0)][D0(A7)+D7(A0)] \} \\
& -1/2 D0 \{ [D1(A2)-D2(A1)][D1(A2)-D2(A1)] \} \\
& -1/2 D0 \{ [D2(A3)-D3(A2)][D2(A3)-D3(A2)] \} \\
& -1/2 D0 \{ [D3(A1)-D1(A3)][D3(A1)-D1(A3)] \} \\
& -1/2 D0 \{ [D7(A6)-D6(A7)][D7(A6)-D6(A7)] \} \\
& -1/2 D0 \{ [D6(A1)-D1(A6)][D6(A1)-D1(A6)] \} \\
& -1/2 D0 \{ [D1(A7)-D7(A1)][D1(A7)-D7(A1)] \} \\
& -1/2 D0 \{ [D5(A7)-D7(A5)][D5(A7)-D7(A5)] \} \\
& -1/2 D0 \{ [D7(A2)-D2(A7)][D7(A2)-D2(A7)] \} \\
& -1/2 D0 \{ [D2(A5)-D5(A2)][D2(A5)-D5(A2)] \} \\
& -1/2 D0 \{ [D6(A5)-D5(A6)][D6(A5)-D5(A6)] \} \\
& -1/2 D0 \{ [D5(A3)-D3(A5)][D5(A3)-D3(A5)] \} \\
& -1/2 D0 \{ [D3(A6)-D6(A3)][D3(A6)-D6(A3)] \} \\
& -1/2 D0 \{ [D1(A4)-D4(A1)][D1(A4)-D4(A1)] \} \\
& -1/2 D0 \{ [D4(A5)-D5(A4)][D4(A5)-D5(A4)] \} \\
& -1/2 D0 \{ [D5(A1)-D1(A5)][D5(A1)-D1(A5)] \} \\
& -1/2 D0 \{ [D2(A4)-D4(A2)][D2(A4)-D4(A2)] \} \\
& -1/2 D0 \{ [D4(A6)-D6(A4)][D4(A6)-D6(A4)] \} \\
& -1/2 D0 \{ [D6(A2)-D2(A6)][D6(A2)-D2(A6)] \} \\
& -1/2 D0 \{ [D3(A4)-D4(A3)][D3(A4)-D4(A3)] \} \\
& -1/2 D0 \{ [D4(A7)-D7(A4)][D4(A7)-D7(A4)] \} \\
& -1/2 D0 \{ [D7(A3)-D3(A7)][D7(A3)-D3(A7)] \}
\end{aligned}$$

$$\begin{aligned}
& -D1 \{ [D2(A1)-D1(A2)][D0(A2)+D2(A0)] \} \\
& -D1 \{ [D3(A1)-D1(A3)][D0(A3)+D3(A0)] \} \\
& -D1 \{ [D4(A1)-D1(A4)][D0(A4)+D4(A0)] \} \\
& -D1 \{ [D5(A1)-D1(A5)][D0(A5)+D5(A0)] \} \\
& -D1 \{ [D6(A1)-D1(A6)][D0(A6)+D6(A0)] \} \\
& -D1 \{ [D7(A1)-D1(A7)][D0(A7)+D7(A0)] \}
\end{aligned}$$

$$\begin{aligned}
& -D2 \{ [D1(A2)-D2(A1)][D0(A1)+D1(A0)] \} \\
& -D2 \{ [D3(A2)-D2(A3)][D0(A3)+D3(A0)] \}
\end{aligned}$$

$$\begin{aligned} & -D2 \{ [D4(A2) - D2(A4)] [D0(A4) + D4(A0)] \} \\ & -D2 \{ [D5(A2) - D2(A5)] [D0(A5) + D5(A0)] \} \\ & -D2 \{ [D6(A2) - D2(A6)] [D0(A6) + D6(A0)] \} \\ & -D2 \{ [D7(A2) - D2(A7)] [D0(A7) + D7(A0)] \} \end{aligned}$$

$$\begin{aligned} & -D3 \{ [D1(A3) - D3(A1)] [D0(A1) + D1(A0)] \} \\ & -D3 \{ [D2(A3) - D3(A2)] [D0(A2) + D2(A0)] \} \\ & -D3 \{ [D4(A3) - D3(A4)] [D0(A4) + D4(A0)] \} \\ & -D3 \{ [D5(A3) - D3(A5)] [D0(A5) + D5(A0)] \} \\ & -D3 \{ [D6(A3) - D3(A6)] [D0(A6) + D6(A0)] \} \\ & -D3 \{ [D7(A3) - D3(A7)] [D0(A7) + D7(A0)] \} \end{aligned}$$

$$\begin{aligned} & -D4 \{ [D1(A4) - D4(A1)] [D0(A1) + D1(A0)] \} \\ & -D4 \{ [D2(A4) - D4(A2)] [D0(A2) + D2(A0)] \} \\ & -D4 \{ [D3(A4) - D4(A3)] [D0(A3) + D3(A0)] \} \\ & -D4 \{ [D5(A4) - D4(A5)] [D0(A5) + D5(A0)] \} \\ & -D4 \{ [D6(A4) - D4(A6)] [D0(A6) + D6(A0)] \} \\ & -D4 \{ [D7(A4) - D4(A7)] [D0(A7) + D7(A0)] \} \end{aligned}$$

$$\begin{aligned} & -D5 \{ [D1(A5) - D5(A1)] [D0(A1) + D1(A0)] \} \\ & -D5 \{ [D2(A5) - D5(A2)] [D0(A2) + D2(A0)] \} \\ & -D5 \{ [D3(A5) - D5(A3)] [D0(A3) + D3(A0)] \} \\ & -D5 \{ [D4(A5) - D5(A4)] [D0(A4) + D4(A0)] \} \\ & -D5 \{ [D6(A5) - D5(A6)] [D0(A6) + D6(A0)] \} \\ & -D5 \{ [D7(A5) - D5(A7)] [D0(A7) + D7(A0)] \} \end{aligned}$$

$$\begin{aligned} & -D6 \{ [D1(A6) - D6(A1)] [D0(A1) + D1(A0)] \} \\ & -D6 \{ [D2(A6) - D6(A2)] [D0(A2) + D2(A0)] \} \\ & -D6 \{ [D3(A6) - D6(A3)] [D0(A3) + D3(A0)] \} \\ & -D6 \{ [D4(A6) - D6(A4)] [D0(A4) + D4(A0)] \} \\ & -D6 \{ [D5(A6) - D6(A5)] [D0(A5) + D5(A0)] \} \\ & -D6 \{ [D7(A6) - D6(A7)] [D0(A7) + D7(A0)] \} \end{aligned}$$

$$\begin{aligned} & -D7 \{ [D1(A7) - D7(A1)] [D0(A1) + D1(A0)] \} \\ & -D7 \{ [D2(A7) - D7(A2)] [D0(A2) + D2(A0)] \} \\ & -D7 \{ [D3(A7) - D7(A3)] [D0(A3) + D3(A0)] \} \\ & -D7 \{ [D4(A7) - D7(A4)] [D0(A4) + D4(A0)] \} \\ & -D7 \{ [D5(A7) - D7(A5)] [D0(A5) + D5(A0)] \} \\ & -D7 \{ [D6(A7) - D7(A6)] [D0(A6) + D6(A0)] \} \end{aligned}$$

[1]

$$\begin{aligned} & -D0 \{ [D2(A0) + D0(A2)] [D1(A2) - D2(A1)] \} \\ & -D0 \{ [D3(A0) + D0(A3)] [D1(A3) - D3(A1)] \} \\ & -D0 \{ [D4(A0) + D0(A4)] [D1(A4) - D4(A1)] \} \\ & -D0 \{ [D5(A0) + D0(A5)] [D1(A5) - D5(A1)] \} \\ & -D0 \{ [D6(A0) + D0(A6)] [D1(A6) - D6(A1)] \} \\ & -D0 \{ [D7(A0) + D0(A7)] [D1(A7) - D7(A1)] \} \end{aligned}$$

$$\begin{aligned} & -1/2 D1 \{ [D0(A1) + D1(A0)] [D0(A1) + D1(A0)] \} \\ & +1/2 D1 \{ [D0(A2) + D2(A0)] [D0(A2) + D2(A0)] \} \\ & +1/2 D1 \{ [D0(A3) + D3(A0)] [D0(A3) + D3(A0)] \} \\ & +1/2 D1 \{ [D0(A4) + D4(A0)] [D0(A4) + D4(A0)] \} \\ & +1/2 D1 \{ [D0(A5) + D5(A0)] [D0(A5) + D5(A0)] \} \\ & +1/2 D1 \{ [D0(A6) + D6(A0)] [D0(A6) + D6(A0)] \} \\ & +1/2 D1 \{ [D0(A7) + D7(A0)] [D0(A7) + D7(A0)] \} \\ & +1/2 D1 \{ [D1(A2) - D2(A1)] [D1(A2) - D2(A1)] \} \end{aligned}$$

$-1/2 D1 \{ [D2(A3)-D3(A2)][D2(A3)-D3(A2)] \}$
 $+1/2 D1 \{ [D3(A1)-D1(A3)][D3(A1)-D1(A3)] \}$
 $-1/2 D1 \{ [D7(A6)-D6(A7)][D7(A6)-D6(A7)] \}$
 $+1/2 D1 \{ [D6(A1)-D1(A6)][D6(A1)-D1(A6)] \}$
 $+1/2 D1 \{ [D1(A7)-D7(A1)][D1(A7)-D7(A1)] \}$
 $-1/2 D1 \{ [D5(A7)-D7(A5)][D5(A7)-D7(A5)] \}$
 $-1/2 D1 \{ [D7(A2)-D2(A7)][D7(A2)-D2(A7)] \}$
 $-1/2 D1 \{ [D2(A5)-D5(A2)][D2(A5)-D5(A2)] \}$
 $-1/2 D1 \{ [D6(A5)-D5(A6)][D6(A5)-D5(A6)] \}$
 $-1/2 D1 \{ [D5(A3)-D3(A5)][D5(A3)-D3(A5)] \}$
 $-1/2 D1 \{ [D3(A6)-D6(A3)][D3(A6)-D6(A3)] \}$
 $+1/2 D1 \{ [D1(A4)-D4(A1)][D1(A4)-D4(A1)] \}$
 $-1/2 D1 \{ [D4(A5)-D5(A4)][D4(A5)-D5(A4)] \}$
 $+1/2 D1 \{ [D5(A1)-D1(A5)][D5(A1)-D1(A5)] \}$
 $-1/2 D1 \{ [D2(A4)-D4(A2)][D2(A4)-D4(A2)] \}$
 $-1/2 D1 \{ [D4(A6)-D6(A4)][D4(A6)-D6(A4)] \}$
 $-1/2 D1 \{ [D6(A2)-D2(A6)][D6(A2)-D2(A6)] \}$
 $-1/2 D1 \{ [D3(A4)-D4(A3)][D3(A4)-D4(A3)] \}$
 $-1/2 D1 \{ [D4(A7)-D7(A4)][D4(A7)-D7(A4)] \}$
 $-1/2 D1 \{ [D7(A3)-D3(A7)][D7(A3)-D3(A7)] \}$

$-D2 \{ [D0(A2)+D2(A0)][D1(A0)+D0(A1)] \}$
 $-D2 \{ [D3(A2)-D2(A3)][D1(A3)-D3(A1)] \}$
 $-D2 \{ [D4(A2)-D2(A4)][D1(A4)-D4(A1)] \}$
 $-D2 \{ [D5(A2)-D2(A5)][D1(A5)-D5(A1)] \}$
 $-D2 \{ [D6(A2)-D2(A6)][D1(A6)-D6(A1)] \}$
 $-D2 \{ [D7(A2)-D2(A7)][D1(A7)-D7(A1)] \}$

$-D3 \{ [D0(A3)+D3(A0)][D1(A0)+D0(A1)] \}$
 $-D3 \{ [D2(A3)-D3(A2)][D1(A2)-D2(A1)] \}$
 $-D3 \{ [D4(A3)-D3(A4)][D1(A4)-D4(A1)] \}$
 $-D3 \{ [D5(A3)-D3(A5)][D1(A5)-D5(A1)] \}$
 $-D3 \{ [D6(A3)-D3(A6)][D1(A6)-D6(A1)] \}$
 $-D3 \{ [D7(A3)-D3(A7)][D1(A7)-D7(A1)] \}$

$-D4 \{ [D0(A4)+D4(A0)][D1(A0)+D0(A1)] \}$
 $-D4 \{ [D2(A4)-D4(A2)][D1(A2)-D2(A1)] \}$
 $-D4 \{ [D3(A4)-D4(A3)][D1(A3)-D3(A1)] \}$
 $-D4 \{ [D5(A4)-D4(A5)][D1(A5)-D5(A1)] \}$
 $-D4 \{ [D6(A4)-D4(A6)][D1(A6)-D6(A1)] \}$
 $-D4 \{ [D7(A4)-D4(A7)][D1(A7)-D7(A1)] \}$

$-D5 \{ [D0(A5)+D5(A0)][D1(A0)+D0(A1)] \}$
 $-D5 \{ [D2(A5)-D5(A2)][D1(A2)-D2(A1)] \}$
 $-D5 \{ [D3(A5)-D5(A3)][D1(A3)-D3(A1)] \}$
 $-D5 \{ [D4(A5)-D5(A4)][D1(A4)-D4(A1)] \}$
 $-D5 \{ [D6(A5)-D5(A6)][D1(A6)-D6(A1)] \}$
 $-D5 \{ [D7(A5)-D5(A7)][D1(A7)-D7(A1)] \}$

$-D6 \{ [D0(A6)+D6(A0)][D1(A0)+D0(A1)] \}$
 $-D6 \{ [D2(A6)-D6(A2)][D1(A2)-D2(A1)] \}$
 $-D6 \{ [D3(A6)-D6(A3)][D1(A3)-D3(A1)] \}$
 $-D6 \{ [D4(A6)-D6(A4)][D1(A4)-D4(A1)] \}$
 $-D6 \{ [D5(A6)-D6(A5)][D1(A5)-D5(A1)] \}$
 $-D6 \{ [D7(A6)-D6(A7)][D1(A7)-D7(A1)] \}$

$-D7 \{ [D0(A7)+D7(A0)][D1(A0)+D0(A1)] \}$

$-D7 \{ [D2(A7)-D7(A2)][D1(A2)-D2(A1)] \}$
 $-D7 \{ [D3(A7)-D7(A3)][D1(A3)-D3(A1)] \}$
 $-D7 \{ [D4(A7)-D7(A4)][D1(A4)-D4(A1)] \}$
 $-D7 \{ [D5(A7)-D7(A5)][D1(A5)-D5(A1)] \}$
 $-D7 \{ [D6(A7)-D7(A6)][D1(A6)-D6(A1)] \}$

[2]

$-D0 \{ [D1(A0)+D0(A1)][D2(A1)-D1(A2)] \}$
 $-D0 \{ [D3(A0)+D0(A3)][D2(A3)-D3(A2)] \}$
 $-D0 \{ [D4(A0)+D0(A4)][D2(A4)-D4(A2)] \}$
 $-D0 \{ [D5(A0)+D0(A5)][D2(A5)-D5(A2)] \}$
 $-D0 \{ [D6(A0)+D0(A6)][D2(A6)-D6(A2)] \}$
 $-D0 \{ [D7(A0)+D0(A7)][D2(A7)-D7(A2)] \}$

$-D1 \{ [D0(A1)+D1(A0)][D2(A0)+D0(A2)] \}$
 $-D1 \{ [D3(A1)-D1(A3)][D2(A3)-D3(A2)] \}$
 $-D1 \{ [D4(A1)-D1(A4)][D2(A4)-D4(A2)] \}$
 $-D1 \{ [D5(A1)-D1(A5)][D2(A5)-D5(A2)] \}$
 $-D1 \{ [D6(A1)-D1(A6)][D2(A6)-D6(A2)] \}$
 $-D1 \{ [D7(A1)-D1(A7)][D2(A7)-D7(A2)] \}$

$+1/2 D2 \{ [D0(A1)+D1(A0)][D0(A1)+D1(A0)] \}$
 $-1/2 D2 \{ [D0(A2)+D2(A0)][D0(A2)+D2(A0)] \}$
 $+1/2 D2 \{ [D0(A3)+D3(A0)][D0(A3)+D3(A0)] \}$
 $+1/2 D2 \{ [D0(A4)+D4(A0)][D0(A4)+D4(A0)] \}$
 $+1/2 D2 \{ [D0(A5)+D5(A0)][D0(A5)+D5(A0)] \}$
 $+1/2 D2 \{ [D0(A6)+D6(A0)][D0(A6)+D6(A0)] \}$
 $+1/2 D2 \{ [D0(A7)+D7(A0)][D0(A7)+D7(A0)] \}$
 $+1/2 D2 \{ [D1(A2)-D2(A1)][D1(A2)-D2(A1)] \}$
 $+1/2 D2 \{ [D2(A3)-D3(A2)][D2(A3)-D3(A2)] \}$
 $-1/2 D2 \{ [D3(A1)-D1(A3)][D3(A1)-D1(A3)] \}$
 $-1/2 D2 \{ [D7(A6)-D6(A7)][D7(A6)-D6(A7)] \}$
 $-1/2 D2 \{ [D6(A1)-D1(A6)][D6(A1)-D1(A6)] \}$
 $-1/2 D2 \{ [D1(A7)-D7(A1)][D1(A7)-D7(A1)] \}$
 $-1/2 D2 \{ [D5(A7)-D7(A5)][D5(A7)-D7(A5)] \}$
 $+1/2 D2 \{ [D7(A2)-D2(A7)][D7(A2)-D2(A7)] \}$
 $+1/2 D2 \{ [D2(A5)-D5(A2)][D2(A5)-D5(A2)] \}$
 $-1/2 D2 \{ [D6(A5)-D5(A6)][D6(A5)-D5(A6)] \}$
 $-1/2 D2 \{ [D5(A3)-D3(A5)][D5(A3)-D3(A5)] \}$
 $-1/2 D2 \{ [D3(A6)-D6(A3)][D3(A6)-D6(A3)] \}$
 $-1/2 D2 \{ [D1(A4)-D4(A1)][D1(A4)-D4(A1)] \}$
 $-1/2 D2 \{ [D4(A5)-D5(A4)][D4(A5)-D5(A4)] \}$
 $-1/2 D2 \{ [D5(A1)-D1(A5)][D5(A1)-D1(A5)] \}$
 $+1/2 D2 \{ [D2(A4)-D4(A2)][D2(A4)-D4(A2)] \}$
 $-1/2 D2 \{ [D4(A6)-D6(A4)][D4(A6)-D6(A4)] \}$
 $+1/2 D2 \{ [D6(A2)-D2(A6)][D6(A2)-D2(A6)] \}$
 $-1/2 D2 \{ [D3(A4)-D4(A3)][D3(A4)-D4(A3)] \}$
 $-1/2 D2 \{ [D4(A7)-D7(A4)][D4(A7)-D7(A4)] \}$
 $-1/2 D2 \{ [D7(A3)-D3(A7)][D7(A3)-D3(A7)] \}$

$-D3 \{ [D0(A3)+D3(A0)][D2(A0)+D0(A2)] \}$
 $-D3 \{ [D1(A3)-D3(A1)][D2(A1)-D1(A2)] \}$
 $-D3 \{ [D4(A3)-D3(A4)][D2(A4)-D4(A2)] \}$
 $-D3 \{ [D5(A3)-D3(A5)][D2(A5)-D5(A2)] \}$
 $-D3 \{ [D6(A3)-D3(A6)][D2(A6)-D6(A2)] \}$
 $-D3 \{ [D7(A3)-D3(A7)][D2(A7)-D7(A2)] \}$

$$\begin{aligned}
& -D4 \{ [D0(A4)+D4(A0)][D2(A0)+D0(A2)] \} \\
& -D4 \{ [D1(A4)-D4(A1)][D2(A1)-D1(A2)] \} \\
& -D4 \{ [D3(A4)-D4(A3)][D2(A3)-D3(A2)] \} \\
& -D4 \{ [D5(A4)-D4(A5)][D2(A5)-D5(A2)] \} \\
& -D4 \{ [D6(A4)-D4(A6)][D2(A6)-D6(A2)] \} \\
& -D4 \{ [D7(A4)-D4(A7)][D2(A7)-D7(A2)] \}
\end{aligned}$$

$$\begin{aligned}
& -D5 \{ [D0(A5)+D5(A0)][D2(A0)+D0(A2)] \} \\
& -D5 \{ [D1(A5)-D5(A1)][D2(A1)-D1(A2)] \} \\
& -D5 \{ [D3(A5)-D5(A3)][D2(A3)-D3(A2)] \} \\
& -D5 \{ [D4(A5)-D5(A4)][D2(A4)-D4(A2)] \} \\
& -D5 \{ [D6(A5)-D5(A6)][D2(A6)-D6(A2)] \} \\
& -D5 \{ [D7(A5)-D5(A7)][D2(A7)-D7(A2)] \}
\end{aligned}$$

$$\begin{aligned}
& -D6 \{ [D0(A6)+D6(A0)][D2(A0)+D0(A2)] \} \\
& -D6 \{ [D1(A6)-D6(A1)][D2(A1)-D1(A2)] \} \\
& -D6 \{ [D3(A6)-D6(A3)][D2(A3)-D3(A2)] \} \\
& -D6 \{ [D4(A6)-D6(A4)][D2(A4)-D4(A2)] \} \\
& -D6 \{ [D5(A6)-D6(A5)][D2(A5)-D5(A2)] \} \\
& -D6 \{ [D7(A6)-D6(A7)][D2(A7)-D7(A2)] \}
\end{aligned}$$

$$\begin{aligned}
& -D7 \{ [D0(A7)+D7(A0)][D2(A0)+D0(A2)] \} \\
& -D7 \{ [D1(A7)-D7(A1)][D2(A1)-D1(A2)] \} \\
& -D7 \{ [D3(A7)-D7(A3)][D2(A3)-D3(A2)] \} \\
& -D7 \{ [D4(A7)-D7(A4)][D2(A4)-D4(A2)] \} \\
& -D7 \{ [D5(A7)-D7(A5)][D2(A5)-D5(A2)] \} \\
& -D7 \{ [D6(A7)-D7(A6)][D2(A6)-D6(A2)] \}
\end{aligned}$$

[3]

$$\begin{aligned}
& -D0 \{ [D1(A0)+D0(A1)][D3(A1)-D1(A3)] \} \\
& -D0 \{ [D2(A0)+D0(A2)][D3(A2)-D2(A3)] \} \\
& -D0 \{ [D4(A0)+D0(A4)][D3(A4)-D4(A3)] \} \\
& -D0 \{ [D5(A0)+D0(A5)][D3(A5)-D5(A3)] \} \\
& -D0 \{ [D6(A0)+D0(A6)][D3(A6)-D6(A3)] \} \\
& -D0 \{ [D7(A0)+D0(A7)][D3(A7)-D7(A3)] \}
\end{aligned}$$

$$\begin{aligned}
& -D1 \{ [D0(A1)+D1(A0)][D3(A0)+D0(A3)] \} \\
& -D1 \{ [D2(A1)-D1(A2)][D3(A2)-D2(A3)] \} \\
& -D1 \{ [D4(A1)-D1(A4)][D3(A4)-D4(A3)] \} \\
& -D1 \{ [D5(A1)-D1(A5)][D3(A5)-D5(A3)] \} \\
& -D1 \{ [D6(A1)-D1(A6)][D3(A6)-D6(A3)] \} \\
& -D1 \{ [D7(A1)-D1(A7)][D3(A7)-D7(A3)] \}
\end{aligned}$$

$$\begin{aligned}
& -D2 \{ [D0(A2)+D2(A0)][D3(A0)+D0(A3)] \} \\
& -D2 \{ [D1(A2)-D2(A1)][D3(A1)-D1(A3)] \} \\
& -D2 \{ [D4(A2)-D2(A4)][D3(A4)-D4(A3)] \} \\
& -D2 \{ [D5(A2)-D2(A5)][D3(A5)-D5(A3)] \} \\
& -D2 \{ [D6(A2)-D2(A6)][D3(A6)-D6(A3)] \} \\
& -D2 \{ [D7(A2)-D2(A7)][D3(A7)-D7(A3)] \}
\end{aligned}$$

$$\begin{aligned}
& +1/2 D3 \{ [D0(A1)+D1(A0)][D0(A1)+D1(A0)] \} \\
& +1/2 D3 \{ [D0(A2)+D2(A0)][D0(A2)+D2(A0)] \} \\
& -1/2 D3 \{ [D0(A3)+D3(A0)][D0(A3)+D3(A0)] \} \\
& +1/2 D3 \{ [D0(A4)+D4(A0)][D0(A4)+D4(A0)] \} \\
& +1/2 D3 \{ [D0(A5)+D5(A0)][D0(A5)+D5(A0)] \}
\end{aligned}$$

$+1/2 D3 \{ [D0(A6)+D6(A0)][D0(A6)+D6(A0)] \}$
 $+1/2 D3 \{ [D0(A7)+D7(A0)][D0(A7)+D7(A0)] \}$
 $-1/2 D3 \{ [D1(A2)-D2(A1)][D1(A2)-D2(A1)] \}$
 $+1/2 D3 \{ [D2(A3)-D3(A2)][D2(A3)-D3(A2)] \}$
 $+1/2 D3 \{ [D3(A1)-D1(A3)][D3(A1)-D1(A3)] \}$
 $-1/2 D3 \{ [D7(A6)-D6(A7)][D7(A6)-D6(A7)] \}$
 $-1/2 D3 \{ [D6(A1)-D1(A6)][D6(A1)-D1(A6)] \}$
 $-1/2 D3 \{ [D1(A7)-D7(A1)][D1(A7)-D7(A1)] \}$
 $-1/2 D3 \{ [D5(A7)-D7(A5)][D5(A7)-D7(A5)] \}$
 $-1/2 D3 \{ [D7(A2)-D2(A7)][D7(A2)-D2(A7)] \}$
 $-1/2 D3 \{ [D2(A5)-D5(A2)][D2(A5)-D5(A2)] \}$
 $-1/2 D3 \{ [D6(A5)-D5(A6)][D6(A5)-D5(A6)] \}$
 $+1/2 D3 \{ [D5(A3)-D3(A5)][D5(A3)-D3(A5)] \}$
 $+1/2 D3 \{ [D3(A6)-D6(A3)][D3(A6)-D6(A3)] \}$
 $-1/2 D3 \{ [D1(A4)-D4(A1)][D1(A4)-D4(A1)] \}$
 $-1/2 D3 \{ [D4(A5)-D5(A4)][D4(A5)-D5(A4)] \}$
 $-1/2 D3 \{ [D5(A1)-D1(A5)][D5(A1)-D1(A5)] \}$
 $-1/2 D3 \{ [D2(A4)-D4(A2)][D2(A4)-D4(A2)] \}$
 $-1/2 D3 \{ [D4(A6)-D6(A4)][D4(A6)-D6(A4)] \}$
 $-1/2 D3 \{ [D6(A2)-D2(A6)][D6(A2)-D2(A6)] \}$
 $+1/2 D3 \{ [D3(A4)-D4(A3)][D3(A4)-D4(A3)] \}$
 $-1/2 D3 \{ [D4(A7)-D7(A4)][D4(A7)-D7(A4)] \}$
 $+1/2 D3 \{ [D7(A3)-D3(A7)][D7(A3)-D3(A7)] \}$

$-D4 \{ [D0(A4)+D4(A0)][D3(A0)+D0(A3)] \}$
 $-D4 \{ [D1(A4)-D4(A1)][D3(A1)-D1(A3)] \}$
 $-D4 \{ [D2(A4)-D4(A2)][D3(A2)-D2(A3)] \}$
 $-D4 \{ [D5(A4)-D4(A5)][D3(A5)-D5(A3)] \}$
 $-D4 \{ [D6(A4)-D4(A6)][D3(A6)-D6(A3)] \}$
 $-D4 \{ [D7(A4)-D4(A7)][D3(A7)-D7(A3)] \}$

$-D5 \{ [D0(A5)+D5(A0)][D3(A0)+D0(A3)] \}$
 $-D5 \{ [D1(A5)-D5(A1)][D3(A1)-D1(A3)] \}$
 $-D5 \{ [D2(A5)-D5(A2)][D3(A2)-D2(A3)] \}$
 $-D5 \{ [D4(A5)-D5(A4)][D3(A4)-D4(A3)] \}$
 $-D5 \{ [D6(A5)-D5(A6)][D3(A6)-D6(A3)] \}$
 $-D5 \{ [D7(A5)-D5(A7)][D3(A7)-D7(A3)] \}$

$-D6 \{ [D0(A6)+D6(A0)][D3(A0)+D0(A3)] \}$
 $-D6 \{ [D1(A6)-D6(A1)][D3(A1)-D1(A3)] \}$
 $-D6 \{ [D2(A6)-D6(A2)][D3(A2)-D2(A3)] \}$
 $-D6 \{ [D4(A6)-D6(A4)][D3(A4)-D4(A3)] \}$
 $-D6 \{ [D5(A6)-D6(A5)][D3(A5)-D5(A3)] \}$
 $-D6 \{ [D7(A6)-D6(A7)][D3(A7)-D7(A3)] \}$

$-D7 \{ [D0(A7)+D7(A0)][D3(A0)+D0(A3)] \}$
 $-D7 \{ [D1(A7)-D7(A1)][D3(A1)-D1(A3)] \}$
 $-D7 \{ [D2(A7)-D7(A2)][D3(A2)-D2(A3)] \}$
 $-D7 \{ [D4(A7)-D7(A4)][D3(A4)-D4(A3)] \}$
 $-D7 \{ [D5(A7)-D7(A5)][D3(A5)-D5(A3)] \}$
 $-D7 \{ [D6(A7)-D7(A6)][D3(A6)-D6(A3)] \}$

[4]

$-D0 \{ [D1(A0)+D0(A1)][D4(A1)-D1(A4)] \}$
 $-D0 \{ [D2(A0)+D0(A2)][D4(A2)-D2(A4)] \}$
 $-D0 \{ [D3(A0)+D0(A3)][D4(A3)-D3(A4)] \}$

-D0 { [D5(A0)+D0(A5)][D4(A5)-D5(A4)] }
-D0 { [D6(A0)+D0(A6)][D4(A6)-D6(A4)] }
-D0 { [D7(A0)+D0(A7)][D4(A7)-D7(A4)] }

-D1 { [D0(A1)+D1(A0)][D4(A0)+D0(A4)] }
-D1 { [D2(A1)-D1(A2)][D4(A2)-D2(A4)] }
-D1 { [D3(A1)-D1(A3)][D4(A3)-D3(A4)] }
-D1 { [D5(A1)-D1(A5)][D4(A5)-D5(A4)] }
-D1 { [D6(A1)-D1(A6)][D4(A6)-D6(A4)] }
-D1 { [D7(A1)-D1(A7)][D4(A7)-D7(A4)] }

-D2 { [D0(A2)+D2(A0)][D4(A0)+D0(A4)] }
-D2 { [D1(A2)-D2(A1)][D4(A1)-D1(A4)] }
-D2 { [D3(A2)-D2(A3)][D4(A3)-D3(A4)] }
-D2 { [D5(A2)-D2(A5)][D4(A5)-D5(A4)] }
-D2 { [D6(A2)-D2(A6)][D4(A6)-D6(A4)] }
-D2 { [D7(A2)-D2(A7)][D4(A7)-D7(A4)] }

-D3 { [D0(A3)+D3(A0)][D4(A0)+D0(A4)] }
-D3 { [D1(A3)-D3(A1)][D4(A1)-D1(A4)] }
-D3 { [D2(A3)-D3(A2)][D4(A2)-D2(A4)] }
-D3 { [D5(A3)-D3(A5)][D4(A5)-D5(A4)] }
-D3 { [D6(A3)-D3(A6)][D4(A6)-D6(A4)] }
-D3 { [D7(A3)-D3(A7)][D4(A7)-D7(A4)] }

+1/2 D4 { [D0(A1)+D1(A0)][D0(A1)+D1(A0)] }
+1/2 D4 { [D0(A2)+D2(A0)][D0(A2)+D2(A0)] }
+1/2 D4 { [D0(A3)+D3(A0)][D0(A3)+D3(A0)] }
-1/2 D4 { [D0(A4)+D4(A0)][D0(A4)+D4(A0)] }
+1/2 D4 { [D0(A5)+D5(A0)][D0(A5)+D5(A0)] }
+1/2 D4 { [D0(A6)+D6(A0)][D0(A6)+D6(A0)] }
+1/2 D4 { [D0(A7)+D7(A0)][D0(A7)+D7(A0)] }
-1/2 D4 { [D1(A2)-D2(A1)][D1(A2)-D2(A1)] }
-1/2 D4 { [D2(A3)-D3(A2)][D2(A3)-D3(A2)] }
-1/2 D4 { [D3(A1)-D1(A3)][D3(A1)-D1(A3)] }
-1/2 D4 { [D7(A6)-D6(A7)][D7(A6)-D6(A7)] }
-1/2 D4 { [D6(A1)-D1(A6)][D6(A1)-D1(A6)] }
-1/2 D4 { [D1(A7)-D7(A1)][D1(A7)-D7(A1)] }
-1/2 D4 { [D5(A7)-D7(A5)][D5(A7)-D7(A5)] }
-1/2 D4 { [D7(A2)-D2(A7)][D7(A2)-D2(A7)] }
-1/2 D4 { [D2(A5)-D5(A2)][D2(A5)-D5(A2)] }
-1/2 D4 { [D6(A5)-D5(A6)][D6(A5)-D5(A6)] }
-1/2 D4 { [D5(A3)-D3(A5)][D5(A3)-D3(A5)] }
-1/2 D4 { [D3(A6)-D6(A3)][D3(A6)-D6(A3)] }
+1/2 D4 { [D1(A4)-D4(A1)][D1(A4)-D4(A1)] }
+1/2 D4 { [D4(A5)-D5(A4)][D4(A5)-D5(A4)] }
-1/2 D4 { [D5(A1)-D1(A5)][D5(A1)-D1(A5)] }
+1/2 D4 { [D2(A4)-D4(A2)][D2(A4)-D4(A2)] }
+1/2 D4 { [D4(A6)-D6(A4)][D4(A6)-D6(A4)] }
-1/2 D4 { [D6(A2)-D2(A6)][D6(A2)-D2(A6)] }
+1/2 D4 { [D3(A4)-D4(A3)][D3(A4)-D4(A3)] }
+1/2 D4 { [D4(A7)-D7(A4)][D4(A7)-D7(A4)] }
-1/2 D4 { [D7(A3)-D3(A7)][D7(A3)-D3(A7)] }

-D5 { [D0(A5)+D5(A0)][D4(A0)+D0(A4)] }
-D5 { [D1(A5)-D5(A1)][D4(A1)-D1(A4)] }
-D5 { [D2(A5)-D5(A2)][D4(A2)-D2(A4)] }

$$\begin{aligned} -D5 & \{ [D3(A5)-D5(A3)][D4(A3)-D3(A4)] \} \\ -D5 & \{ [D6(A5)-D5(A6)][D4(A6)-D6(A4)] \} \\ -D5 & \{ [D7(A5)-D5(A7)][D4(A7)-D7(A4)] \} \end{aligned}$$

$$\begin{aligned} -D6 & \{ [D0(A6)+D6(A0)][D4(A0)+D0(A4)] \} \\ -D6 & \{ [D1(A6)-D6(A1)][D4(A1)-D1(A4)] \} \\ -D6 & \{ [D2(A6)-D6(A2)][D4(A2)-D2(A4)] \} \\ -D6 & \{ [D3(A6)-D6(A3)][D4(A3)-D3(A4)] \} \\ -D6 & \{ [D5(A6)-D6(A5)][D4(A5)-D5(A4)] \} \\ -D6 & \{ [D7(A6)-D6(A7)][D4(A7)-D7(A4)] \} \end{aligned}$$

$$\begin{aligned} -D7 & \{ [D0(A7)+D7(A0)][D4(A0)+D0(A4)] \} \\ -D7 & \{ [D1(A7)-D7(A1)][D4(A1)-D1(A4)] \} \\ -D7 & \{ [D2(A7)-D7(A2)][D4(A2)-D2(A4)] \} \\ -D7 & \{ [D3(A7)-D7(A3)][D4(A3)-D3(A4)] \} \\ -D7 & \{ [D5(A7)-D7(A5)][D4(A5)-D5(A4)] \} \\ -D7 & \{ [D6(A7)-D7(A6)][D4(A6)-D6(A4)] \} \end{aligned}$$

[5]

$$\begin{aligned} -D0 & \{ [D1(A0)+D0(A1)][D5(A1)-D1(A5)] \} \\ -D0 & \{ [D2(A0)+D0(A2)][D5(A2)-D2(A5)] \} \\ -D0 & \{ [D3(A0)+D0(A3)][D5(A3)-D3(A5)] \} \\ -D0 & \{ [D4(A0)+D0(A4)][D5(A4)-D4(A5)] \} \\ -D0 & \{ [D6(A0)+D0(A6)][D5(A6)-D6(A5)] \} \\ -D0 & \{ [D7(A0)+D0(A7)][D5(A7)-D7(A5)] \} \end{aligned}$$

$$\begin{aligned} -D1 & \{ [D0(A1)+D1(A0)][D5(A0)+D0(A5)] \} \\ -D1 & \{ [D2(A1)-D1(A2)][D5(A2)-D2(A5)] \} \\ -D1 & \{ [D3(A1)-D1(A3)][D5(A3)-D3(A5)] \} \\ -D1 & \{ [D4(A1)-D1(A4)][D5(A4)-D4(A5)] \} \\ -D1 & \{ [D6(A1)-D1(A6)][D5(A6)-D6(A5)] \} \\ -D1 & \{ [D7(A1)-D1(A7)][D5(A7)-D7(A5)] \} \end{aligned}$$

$$\begin{aligned} -D2 & \{ [D0(A2)+D2(A0)][D5(A0)+D0(A5)] \} \\ -D2 & \{ [D1(A2)-D2(A1)][D5(A1)-D1(A5)] \} \\ -D2 & \{ [D3(A2)-D2(A3)][D5(A3)-D3(A5)] \} \\ -D2 & \{ [D4(A2)-D2(A4)][D5(A4)-D4(A5)] \} \\ -D2 & \{ [D6(A2)-D2(A6)][D5(A6)-D6(A5)] \} \\ -D2 & \{ [D7(A2)-D2(A7)][D5(A7)-D7(A5)] \} \end{aligned}$$

$$\begin{aligned} -D3 & \{ [D0(A3)+D3(A0)][D5(A0)+D0(A5)] \} \\ -D3 & \{ [D1(A3)-D3(A1)][D5(A1)-D1(A5)] \} \\ -D3 & \{ [D2(A3)-D3(A2)][D5(A2)-D2(A5)] \} \\ -D3 & \{ [D4(A3)-D3(A4)][D5(A4)-D4(A5)] \} \\ -D3 & \{ [D6(A3)-D3(A6)][D5(A6)-D6(A5)] \} \\ -D3 & \{ [D7(A3)-D3(A7)][D5(A7)-D7(A5)] \} \end{aligned}$$

$$\begin{aligned} -D4 & \{ [D0(A4)+D4(A0)][D5(A0)+D0(A5)] \} \\ -D4 & \{ [D1(A4)-D4(A1)][D5(A1)-D1(A5)] \} \\ -D4 & \{ [D2(A4)-D4(A2)][D5(A2)-D2(A5)] \} \\ -D4 & \{ [D3(A4)-D4(A3)][D5(A3)-D3(A5)] \} \\ -D4 & \{ [D6(A4)-D4(A6)][D5(A6)-D6(A5)] \} \\ -D4 & \{ [D7(A4)-D4(A7)][D5(A7)-D7(A5)] \} \end{aligned}$$

$$\begin{aligned} +1/2 D5 & \{ [D0(A1)+D1(A0)][D0(A1)+D1(A0)] \} \\ +1/2 D5 & \{ [D0(A2)+D2(A0)][D0(A2)+D2(A0)] \} \end{aligned}$$

$+1/2 D5 \{ [D0(A3)+D3(A0)][D0(A3)+D3(A0)] \}$
 $+1/2 D5 \{ [D0(A4)+D4(A0)][D0(A4)+D4(A0)] \}$
 $-1/2 D5 \{ [D0(A5)+D5(A0)][D0(A5)+D5(A0)] \}$
 $+1/2 D5 \{ [D0(A6)+D6(A0)][D0(A6)+D6(A0)] \}$
 $+1/2 D5 \{ [D0(A7)+D7(A0)][D0(A7)+D7(A0)] \}$
 $-1/2 D5 \{ [D1(A2)-D2(A1)][D1(A2)-D2(A1)] \}$
 $-1/2 D5 \{ [D2(A3)-D3(A2)][D2(A3)-D3(A2)] \}$
 $-1/2 D5 \{ [D3(A1)-D1(A3)][D3(A1)-D1(A3)] \}$
 $-1/2 D5 \{ [D7(A6)-D6(A7)][D7(A6)-D6(A7)] \}$
 $-1/2 D5 \{ [D6(A1)-D1(A6)][D6(A1)-D1(A6)] \}$
 $-1/2 D5 \{ [D1(A7)-D7(A1)][D1(A7)-D7(A1)] \}$
 $+1/2 D5 \{ [D5(A7)-D7(A5)][D5(A7)-D7(A5)] \}$
 $-1/2 D5 \{ [D7(A2)-D2(A7)][D7(A2)-D2(A7)] \}$
 $+1/2 D5 \{ [D2(A5)-D5(A2)][D2(A5)-D5(A2)] \}$
 $+1/2 D5 \{ [D6(A5)-D5(A6)][D6(A5)-D5(A6)] \}$
 $+1/2 D5 \{ [D5(A3)-D3(A5)][D5(A3)-D3(A5)] \}$
 $-1/2 D5 \{ [D3(A6)-D6(A3)][D3(A6)-D6(A3)] \}$
 $-1/2 D5 \{ [D1(A4)-D4(A1)][D1(A4)-D4(A1)] \}$
 $+1/2 D5 \{ [D4(A5)-D5(A4)][D4(A5)-D5(A4)] \}$
 $+1/2 D5 \{ [D5(A1)-D1(A5)][D5(A1)-D1(A5)] \}$
 $-1/2 D5 \{ [D2(A4)-D4(A2)][D2(A4)-D4(A2)] \}$
 $-1/2 D5 \{ [D4(A6)-D6(A4)][D4(A6)-D6(A4)] \}$
 $-1/2 D5 \{ [D6(A2)-D2(A6)][D6(A2)-D2(A6)] \}$
 $-1/2 D5 \{ [D3(A4)-D4(A3)][D3(A4)-D4(A3)] \}$
 $-1/2 D5 \{ [D4(A7)-D7(A4)][D4(A7)-D7(A4)] \}$
 $-1/2 D5 \{ [D7(A3)-D3(A7)][D7(A3)-D3(A7)] \}$

$-D6 \{ [D0(A6)+D6(A0)][D5(A0)+D0(A5)] \}$
 $-D6 \{ [D1(A6)-D6(A1)][D5(A1)-D1(A5)] \}$
 $-D6 \{ [D2(A6)-D6(A2)][D5(A2)-D2(A5)] \}$
 $-D6 \{ [D3(A6)-D6(A3)][D5(A3)-D3(A5)] \}$
 $-D6 \{ [D4(A6)-D6(A4)][D5(A4)-D4(A5)] \}$
 $-D6 \{ [D7(A6)-D6(A7)][D5(A7)-D7(A5)] \}$

$-D7 \{ [D0(A7)+D7(A0)][D5(A0)+D0(A5)] \}$
 $-D7 \{ [D1(A7)-D7(A1)][D5(A1)-D1(A5)] \}$
 $-D7 \{ [D2(A7)-D7(A2)][D5(A2)-D2(A5)] \}$
 $-D7 \{ [D3(A7)-D7(A3)][D5(A3)-D3(A5)] \}$
 $-D7 \{ [D4(A7)-D7(A4)][D5(A4)-D4(A5)] \}$
 $-D7 \{ [D6(A7)-D7(A6)][D5(A6)-D6(A5)] \}$

[6]

$-D0 \{ [D1(A0)+D0(A1)][D6(A1)-D1(A6)] \}$
 $-D0 \{ [D2(A0)+D0(A2)][D6(A2)-D2(A6)] \}$
 $-D0 \{ [D3(A0)+D0(A3)][D6(A3)-D3(A6)] \}$
 $-D0 \{ [D4(A0)+D0(A4)][D6(A4)-D4(A6)] \}$
 $-D0 \{ [D5(A0)+D0(A5)][D6(A5)-D5(A6)] \}$
 $-D0 \{ [D7(A0)+D0(A7)][D6(A7)-D7(A6)] \}$

$-D1 \{ [D0(A1)+D1(A0)][D6(A0)+D0(A6)] \}$
 $-D1 \{ [D2(A1)-D1(A2)][D6(A2)-D2(A6)] \}$
 $-D1 \{ [D3(A1)-D1(A3)][D6(A3)-D3(A6)] \}$
 $-D1 \{ [D4(A1)-D1(A4)][D6(A4)-D4(A6)] \}$
 $-D1 \{ [D5(A1)-D1(A5)][D6(A5)-D5(A6)] \}$
 $-D1 \{ [D7(A1)-D1(A7)][D6(A7)-D7(A6)] \}$

-D2 { [D0(A2)+D2(A0)][D6(A0)+D0(A6)] }
 -D2 { [D1(A2)-D2(A1)][D6(A1)-D1(A6)] }
 -D2 { [D3(A2)-D2(A3)][D6(A3)-D3(A6)] }
 -D2 { [D4(A2)-D2(A4)][D6(A4)-D4(A6)] }
 -D2 { [D5(A2)-D2(A5)][D6(A5)-D5(A6)] }
 -D2 { [D7(A2)-D2(A7)][D6(A7)-D7(A6)] }

-D3 { [D0(A3)+D3(A0)][D6(A0)+D0(A6)] }
 -D3 { [D1(A3)-D3(A1)][D6(A1)-D1(A6)] }
 -D3 { [D2(A3)-D3(A2)][D6(A2)-D2(A6)] }
 -D3 { [D4(A3)-D3(A4)][D6(A4)-D4(A6)] }
 -D3 { [D5(A3)-D3(A5)][D6(A5)-D5(A6)] }
 -D3 { [D7(A3)-D3(A7)][D6(A7)-D7(A6)] }

-D4 { [D0(A4)+D4(A0)][D6(A0)+D0(A6)] }
 -D4 { [D1(A4)-D4(A1)][D6(A1)-D1(A6)] }
 -D4 { [D2(A4)-D4(A2)][D6(A2)-D2(A6)] }
 -D4 { [D3(A4)-D4(A3)][D6(A3)-D3(A6)] }
 -D4 { [D5(A4)-D4(A5)][D6(A5)-D5(A6)] }
 -D4 { [D7(A4)-D4(A7)][D6(A7)-D7(A6)] }

-D5 { [D0(A5)+D5(A0)][D6(A0)+D0(A6)] }
 -D5 { [D1(A5)-D5(A1)][D6(A1)-D1(A6)] }
 -D5 { [D2(A5)-D5(A2)][D6(A2)-D2(A6)] }
 -D5 { [D3(A5)-D5(A3)][D6(A3)-D3(A6)] }
 -D5 { [D4(A5)-D5(A4)][D6(A4)-D4(A6)] }
 -D5 { [D7(A5)-D5(A7)][D6(A7)-D7(A6)] }

+1/2 D6 { [D0(A1)+D1(A0)][D0(A1)+D1(A0)] }
 +1/2 D6 { [D0(A2)+D2(A0)][D0(A2)+D2(A0)] }
 +1/2 D6 { [D0(A3)+D3(A0)][D0(A3)+D3(A0)] }
 +1/2 D6 { [D0(A4)+D4(A0)][D0(A4)+D4(A0)] }
 +1/2 D6 { [D0(A5)+D5(A0)][D0(A5)+D5(A0)] }
 -1/2 D6 { [D0(A6)+D6(A0)][D0(A6)+D6(A0)] }
 +1/2 D6 { [D0(A7)+D7(A0)][D0(A7)+D7(A0)] }
 -1/2 D6 { [D1(A2)-D2(A1)][D1(A2)-D2(A1)] }
 -1/2 D6 { [D2(A3)-D3(A2)][D2(A3)-D3(A2)] }
 -1/2 D6 { [D3(A1)-D1(A3)][D3(A1)-D1(A3)] }
 +1/2 D6 { [D7(A6)-D6(A7)][D7(A6)-D6(A7)] }
 +1/2 D6 { [D6(A1)-D1(A6)][D6(A1)-D1(A6)] }
 -1/2 D6 { [D1(A7)-D7(A1)][D1(A7)-D7(A1)] }
 -1/2 D6 { [D5(A7)-D7(A5)][D5(A7)-D7(A5)] }
 -1/2 D6 { [D7(A2)-D2(A7)][D7(A2)-D2(A7)] }
 -1/2 D6 { [D2(A5)-D5(A2)][D2(A5)-D5(A2)] }
 +1/2 D6 { [D6(A5)-D5(A6)][D6(A5)-D5(A6)] }
 -1/2 D6 { [D5(A3)-D3(A5)][D5(A3)-D3(A5)] }
 +1/2 D6 { [D3(A6)-D6(A3)][D3(A6)-D6(A3)] }
 -1/2 D6 { [D1(A4)-D4(A1)][D1(A4)-D4(A1)] }
 -1/2 D6 { [D4(A5)-D5(A4)][D4(A5)-D5(A4)] }
 -1/2 D6 { [D5(A1)-D1(A5)][D5(A1)-D1(A5)] }
 -1/2 D6 { [D2(A4)-D4(A2)][D2(A4)-D4(A2)] }
 +1/2 D6 { [D4(A6)-D6(A4)][D4(A6)-D6(A4)] }
 +1/2 D6 { [D6(A2)-D2(A6)][D6(A2)-D2(A6)] }
 -1/2 D6 { [D3(A4)-D4(A3)][D3(A4)-D4(A3)] }
 -1/2 D6 { [D4(A7)-D7(A4)][D4(A7)-D7(A4)] }
 -1/2 D6 { [D7(A3)-D3(A7)][D7(A3)-D3(A7)] }

-D7 { [D0(A7)+D7(A0)][D6(A0)+D0(A6)] }
 -D7 { [D1(A7)-D7(A1)][D6(A1)-D1(A6)] }
 -D7 { [D2(A7)-D7(A2)][D6(A2)-D2(A6)] }
 -D7 { [D3(A7)-D7(A3)][D6(A3)-D3(A6)] }
 -D7 { [D4(A7)-D7(A4)][D6(A4)-D4(A6)] }
 -D7 { [D5(A7)-D7(A5)][D6(A5)-D5(A6)] }

[7]

-D0 { [D1(A0)+D0(A1)][D7(A1)-D1(A7)] }
 -D0 { [D2(A0)+D0(A2)][D7(A2)-D2(A7)] }
 -D0 { [D3(A0)+D0(A3)][D7(A3)-D3(A7)] }
 -D0 { [D4(A0)+D0(A4)][D7(A4)-D4(A7)] }
 -D0 { [D5(A0)+D0(A5)][D7(A5)-D5(A7)] }
 -D0 { [D6(A0)+D0(A6)][D7(A6)-D6(A7)] }

-D1 { [D0(A1)+D1(A0)][D7(A0)+D0(A7)] }
 -D1 { [D2(A1)-D1(A2)][D7(A2)-D2(A7)] }
 -D1 { [D3(A1)-D1(A3)][D7(A3)-D3(A7)] }
 -D1 { [D4(A1)-D1(A4)][D7(A4)-D4(A7)] }
 -D1 { [D5(A1)-D1(A5)][D7(A5)-D5(A7)] }
 -D1 { [D6(A1)-D1(A6)][D7(A6)-D6(A7)] }

-D2 { [D0(A2)+D2(A0)][D7(A0)+D0(A7)] }
 -D2 { [D1(A2)-D2(A1)][D7(A1)-D1(A7)] }
 -D2 { [D3(A2)-D2(A3)][D7(A3)-D3(A7)] }
 -D2 { [D4(A2)-D2(A4)][D7(A4)-D4(A7)] }
 -D2 { [D5(A2)-D2(A5)][D7(A5)-D5(A7)] }
 -D2 { [D6(A2)-D2(A6)][D7(A6)-D6(A7)] }

-D3 { [D0(A3)+D3(A0)][D7(A0)+D0(A7)] }
 -D3 { [D1(A3)-D3(A1)][D7(A1)-D1(A7)] }
 -D3 { [D2(A3)-D3(A2)][D7(A2)-D2(A7)] }
 -D3 { [D4(A3)-D3(A4)][D7(A4)-D4(A7)] }
 -D3 { [D5(A3)-D3(A5)][D7(A5)-D5(A7)] }
 -D3 { [D6(A3)-D3(A6)][D7(A6)-D6(A7)] }

-D4 { [D0(A4)+D4(A0)][D7(A0)+D0(A7)] }
 -D4 { [D1(A4)-D4(A1)][D7(A1)-D1(A7)] }
 -D4 { [D2(A4)-D4(A2)][D7(A2)-D2(A7)] }
 -D4 { [D3(A4)-D4(A3)][D7(A3)-D3(A7)] }
 -D4 { [D5(A4)-D4(A5)][D7(A5)-D5(A7)] }
 -D4 { [D6(A4)-D4(A6)][D7(A6)-D6(A7)] }

-D5 { [D0(A5)+D5(A0)][D7(A0)+D0(A7)] }
 -D5 { [D1(A5)-D5(A1)][D7(A1)-D1(A7)] }
 -D5 { [D2(A5)-D5(A2)][D7(A2)-D2(A7)] }
 -D5 { [D3(A5)-D5(A3)][D7(A3)-D3(A7)] }
 -D5 { [D4(A5)-D5(A4)][D7(A4)-D4(A7)] }
 -D5 { [D6(A5)-D5(A6)][D7(A6)-D6(A7)] }

-D6 { [D0(A6)+D6(A0)][D7(A0)+D0(A7)] }
 -D6 { [D1(A6)-D6(A1)][D7(A1)-D1(A7)] }
 -D6 { [D2(A6)-D6(A2)][D7(A2)-D2(A7)] }
 -D6 { [D3(A6)-D6(A3)][D7(A3)-D3(A7)] }

$-D6 \{ [D4(A6)-D6(A4)][D7(A4)-D4(A7)] \}$
 $-D6 \{ [D5(A6)-D6(A5)][D7(A5)-D5(A7)] \}$

$+1/2 D7 \{ [D0(A1)+D1(A0)][D0(A1)+D1(A0)] \}$
 $+1/2 D7 \{ [D0(A2)+D2(A0)][D0(A2)+D2(A0)] \}$
 $+1/2 D7 \{ [D0(A3)+D3(A0)][D0(A3)+D3(A0)] \}$
 $+1/2 D7 \{ [D0(A4)+D4(A0)][D0(A4)+D4(A0)] \}$
 $+1/2 D7 \{ [D0(A5)+D5(A0)][D0(A5)+D5(A0)] \}$
 $+1/2 D7 \{ [D0(A6)+D6(A0)][D0(A6)+D6(A0)] \}$
 $-1/2 D7 \{ [D0(A7)+D7(A0)][D0(A7)+D7(A0)] \}$
 $-1/2 D7 \{ [D1(A2)-D2(A1)][D1(A2)-D2(A1)] \}$
 $-1/2 D7 \{ [D2(A3)-D3(A2)][D2(A3)-D3(A2)] \}$
 $-1/2 D7 \{ [D3(A1)-D1(A3)][D3(A1)-D1(A3)] \}$
 $+1/2 D7 \{ [D7(A6)-D6(A7)][D7(A6)-D6(A7)] \}$
 $-1/2 D7 \{ [D6(A1)-D1(A6)][D6(A1)-D1(A6)] \}$
 $+1/2 D7 \{ [D1(A7)-D7(A1)][D1(A7)-D7(A1)] \}$
 $+1/2 D7 \{ [D5(A7)-D7(A5)][D5(A7)-D7(A5)] \}$
 $+1/2 D7 \{ [D7(A2)-D2(A7)][D7(A2)-D2(A7)] \}$
 $-1/2 D7 \{ [D2(A5)-D5(A2)][D2(A5)-D5(A2)] \}$
 $-1/2 D7 \{ [D6(A5)-D5(A6)][D6(A5)-D5(A6)] \}$
 $-1/2 D7 \{ [D5(A3)-D3(A5)][D5(A3)-D3(A5)] \}$
 $-1/2 D7 \{ [D3(A6)-D6(A3)][D3(A6)-D6(A3)] \}$
 $-1/2 D7 \{ [D1(A4)-D4(A1)][D1(A4)-D4(A1)] \}$
 $-1/2 D7 \{ [D4(A5)-D5(A4)][D4(A5)-D5(A4)] \}$
 $-1/2 D7 \{ [D5(A1)-D1(A5)][D5(A1)-D1(A5)] \}$
 $-1/2 D7 \{ [D2(A4)-D4(A2)][D2(A4)-D4(A2)] \}$
 $-1/2 D7 \{ [D4(A6)-D6(A4)][D4(A6)-D6(A4)] \}$
 $-1/2 D7 \{ [D6(A2)-D2(A6)][D6(A2)-D2(A6)] \}$
 $-1/2 D7 \{ [D3(A4)-D4(A3)][D3(A4)-D4(A3)] \}$
 $+1/2 D7 \{ [D4(A7)-D7(A4)][D4(A7)-D7(A4)] \}$
 $+1/2 D7 \{ [D7(A3)-D3(A7)][D7(A3)-D3(A7)] \}$

Rick Lockyer

www.octospace.com

For more information see

http://www.octospace.com/files/Octonion_Algebra_and_its_Connection_to_Physics.pdf

f