Quadratic Dual Algebra Relations

$$
\begin{aligned}
&368 + 328 + 358 \\
&478 + 428 + 458 \\
&636 + 686 \\
&236 + 286 \\
&536 + 586 \\
&747 + 787 \\
&247 + 287 \\
&547 + 587 \\
&515 + 585 \\
&635 + 685 \\
&745 + 785 \\
&215 + 275 + 285 \\
&215 - 245 - 285 \\
&363 + 323 \\
&453 + 423 \\
&123 + 153 \\
&863 + 823 + \beta \cdot 853 \\
&474 + 424 \\
&354 + 324 \\
&124 - \beta \cdot 154 \\
&824 + 854 + \beta \cdot 874 \\
&632 + 682 \\
&742 + \beta \cdot 782 \\
&512 + \beta \cdot 532 + \beta \cdot 582 \\
&512 - 542 - \beta \cdot 582 \\
&2 \cdot 212 - 7\beta \cdot 232 \\
&2 \cdot 212 - 2 \cdot 242 \\
&3 \cdot 212 + 3\beta \cdot 282 \\
&321 + 351 \\
&421 - 451 \\
&121 \\
&151 \\
&353 \\
&454 \\
&786 \\
&687
\end{aligned}
\quad = 0
$$

2 x 212 - beta x 232
2 x 212 - 2 x 242
3 x 212 + beta x 282

~~with no hidden~~