

Eq. 3d and Eq. 6 should read:

$$\bar{m}(i) - \bar{m}(j) = -\frac{1}{2*6} + \frac{5}{12} \delta_{ij}$$

$$V_4^4 = \frac{-3}{\sqrt{6}} \times V_{15} + \frac{1}{\sqrt{10}} V_{24} + \frac{1}{\sqrt{15}} \times V_{35}$$

$$V_6^6 = \frac{-5}{\sqrt{15}} \times V_{35}$$

Does not affect any results.