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SetDirectory["C:\\drorbn\\AcademicPensieve\\Projects\\KBH"];
<< KBH.m

n = $SeriesShowDegree = $SeriesCompareDegree = 4;

Rp[a, a]

μ[CWS[0, 0, 0, 0], h[a] LS[⟨a⟩, 0, 0, 0]]

{Rp[a, b] Rp[d, c] Rp[f, e],
  Rp[c, b] Rp[a, d] Rp[f, e]
} // ColumnForm

μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨d⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0]]
μ[CWS[0, 0, 0, 0], h[d] LS[⟨a⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0] + h[b] LS[⟨c⟩, 0, 0, 0]]

{Rp[a, b] Rp[d, c] Rp[f, e] // dm[a, d, a] // dm[b, e, b] // dm[c, f, c],
  Rp[c, b] Rp[a, d] Rp[f, e] // dm[a, f, a] // dm[b, e, b] // dm[c, d, c]
} // ColumnForm

μ[CWS[0, 0, 0, 0], h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨c⟩,  $\frac{\langle ac \rangle}{2}$ ,  $\frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}$ ,  $\frac{\langle aacc \rangle}{24}$ ] + h[c] LS[⟨
μ[CWS[0, 0, 0, 0], h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨c⟩,  $\frac{\langle ac \rangle}{2}$ ,  $\frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}$ ,  $\frac{\langle aacc \rangle}{24}$ ] + h[c] LS[⟨
{Rp[a, b] Rp[d, c] Rp[f, e] // hta[d, a] // tm[a, d, a] // hm[a, d, a] // dm[b, e, b] //
  dm[c, f, c],
  Rp[c, b] Rp[a, d] Rp[f, e] // hta[f, a] // tm[a, f, a] // hm[a, f, a] //
  dm[b, e, b] // dm[c, d, c]
} // ColumnForm

μ[CWS[0, 0, 0, 0], h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨c⟩,  $\frac{\langle ac \rangle}{2}$ ,  $\frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}$ ,  $\frac{\langle aacc \rangle}{24}$ ] + h[c] LS[⟨
μ[CWS[0, 0, 0, 0], h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨c⟩,  $\frac{\langle ac \rangle}{2}$ ,  $\frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}$ ,  $\frac{\langle aacc \rangle}{24}$ ] + h[c] LS[⟨
{ComposeList[{dm[a, d, a], dm[b, e, b], dm[c, f, c]}, Rp[a, b] Rp[d, c] Rp[f, e]],
  ComposeList[{dm[a, f, a], dm[b, e, b], dm[c, d, c]}, Rp[c, b] Rp[a, d] Rp[f, e]]
} // Transpose // MatrixForm

(
  μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨d⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0
  μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨a⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0] + h[a]
  μ[CWS[0, 0, 0, 0], h[c] LS[⟨a⟩, 0, 0, 0] + h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨f⟩,  $\frac{\langle af \rangle}{2}$ ,  $\frac{\langle aaf \rangle}{12}$ 
  μ[CWS[0, 0, 0, 0], h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨c⟩,  $\frac{\langle ac \rangle}{2}$ ,  $\frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}$ ,  $\frac{\langle aacc \rangle}{24}$ ] + h[c] LS
ComposeList[{hta[d, a], tm[a, d, a], hm[a, d, a], hta[e, b], tm[b, e, b], hm[b, e, b],
  hta[f, c], tm[c, f, c], hm[c, f, c]}, Rp[a, b] Rp[d, c] Rp[f, e]] // ColumnForm

μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨d⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0]]
μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨d⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0]]
μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨a⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0]]
μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨a⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0] + h[a] L
μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨a⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0] + h[a] L
μ[CWS[0, 0, 0, 0], h[b] LS[⟨a⟩, 0, 0, 0] + h[c] LS[⟨a⟩, 0, 0, 0] + h[e] LS[⟨f⟩, 0, 0, 0] + h[a] L
μ[CWS[0, 0, 0, 0], h[c] LS[⟨a⟩, 0, 0, 0] + h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨f⟩,  $\frac{\langle af \rangle}{2}$ ,  $\frac{\langle aaf \rangle}{12}$  +  $\frac{\langle aaf \rangle}{12}$ 
μ[CWS[0, 0, 0, 0], h[c] LS[⟨a⟩, 0, 0, 0] + h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨f⟩,  $\frac{\langle af \rangle}{2}$ ,  $\frac{\langle aaf \rangle}{12}$  +  $\frac{\langle aaf \rangle}{12}$ 
μ[CWS[0, 0, 0, 0], h[c] LS[⟨a⟩, 0, 0, 0] + h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨c⟩,  $\frac{\langle ac \rangle}{2}$ ,  $\frac{\langle aac \rangle}{12}$  +  $\frac{\langle acc \rangle}{12}$  +  $\frac{\langle aacc \rangle}{24}$ 
μ[CWS[0, 0, 0, 0], h[a] LS[0, 0, 0, 0] + h[b] LS[⟨a⟩ + ⟨c⟩,  $\frac{\langle ac \rangle}{2}$ ,  $\frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}$ ,  $\frac{\langle aacc \rangle}{24}$ ] + h[c] LS[⟨

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**ComposeList**[{hta[f, a], tm[a, f, a], hm[a, f, a], hta[e, b], tm[b, e, b], hm[b, e, b],  
hta[d, c], tm[c, d, c], hm[c, d, c]}, Rp[c, b] Rp[a, d] Rp[f, e]] // ColumnForm

$$\begin{aligned} & \mu[\text{CWS}[0, 0, 0, 0], h[d] \text{LS}[\langle a \rangle, 0, 0, 0] + h[e] \text{LS}[\langle f \rangle, 0, 0, 0] + h[b] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[d] \text{LS}[\langle a \rangle, 0, 0, 0] + h[e] \text{LS}[\langle f \rangle, 0, 0, 0] + h[b] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[d] \text{LS}[\langle a \rangle, 0, 0, 0] + h[e] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[a] \text{LS}[0, 0, 0, 0] + h[d] \text{LS}[\langle a \rangle, 0, 0, 0] + h[e] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[a] \text{LS}[0, 0, 0, 0] + h[d] \text{LS}[\langle a \rangle, 0, 0, 0] + h[e] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[a] \text{LS}[0, 0, 0, 0] + h[d] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle a \rangle + \langle c \rangle, -\frac{\langle ac \rangle}{2}, \frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[a] \text{LS}[0, 0, 0, 0] + h[d] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle a \rangle + \langle c \rangle, \frac{\langle ac \rangle}{2}, \frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[a] \text{LS}[0, 0, 0, 0] + h[d] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle a \rangle + \langle c \rangle, \frac{\langle ac \rangle}{2}, \frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[a] \text{LS}[0, 0, 0, 0] + h[b] \text{LS}[\langle a \rangle + \langle c \rangle, \frac{\langle ac \rangle}{2}, \frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}, \frac{\langle aacc \rangle}{24}]] + h[c] \text{LS}[\langle c \rangle, 0, 0, 0] \end{aligned}$$

**ComposeList**[{tm[a, d, a], hm[b, e, b]}, Rp[a, b] Rp[d, c] Rp[c, e]] // ColumnForm

$$\begin{aligned} & \mu[\text{CWS}[0, 0, 0, 0], h[b] \text{LS}[\langle a \rangle, 0, 0, 0] + h[c] \text{LS}[\langle d \rangle, 0, 0, 0] + h[e] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[b] \text{LS}[\langle a \rangle, 0, 0, 0] + h[c] \text{LS}[\langle a \rangle, 0, 0, 0] + h[e] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[c] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle a \rangle + \langle c \rangle, \frac{\langle ac \rangle}{2}, \frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}, \frac{\langle aacc \rangle}{24}]] \end{aligned}$$

**ComposeList**[{tm[a, f, a], hm[b, e, b], hta[c, c]},

Rp[c, b] Rp[a, c] Rp[f, e]] // ColumnForm

$$\begin{aligned} & \mu[\text{CWS}[0, 0, 0, 0], h[c] \text{LS}[\langle a \rangle, 0, 0, 0] + h[e] \text{LS}[\langle f \rangle, 0, 0, 0] + h[b] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[c] \text{LS}[\langle a \rangle, 0, 0, 0] + h[e] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle c \rangle, 0, 0, 0]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[c] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle a \rangle + \langle c \rangle, -\frac{\langle ac \rangle}{2}, \frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}, -\frac{\langle aacc \rangle}{24}]] \\ & \mu[\text{CWS}[0, 0, 0, 0], h[c] \text{LS}[\langle a \rangle, 0, 0, 0] + h[b] \text{LS}[\langle a \rangle + \langle c \rangle, \frac{\langle ac \rangle}{2}, \frac{\langle aac \rangle}{12} + \frac{\langle acc \rangle}{12}, \frac{\langle aacc \rangle}{24}]] \end{aligned}$$