December 24, 1941

Dear Kendall,

Many thanks for your two letters on Moments of Moments. I have now checked through the cases you raise, and differ only in the coefficient of k_3^4 in the expansion $\kappa_3^2 \, k\,(4^3)$ This I make to be correct as printed with the four patterns

```
1 1 1
1 1 1
1 1 1
1 1 1
```

giving

$$2(n^4 - 12n^3 + 51n^2 - 74n - 18)$$

```
. 2 1
2 . 1
1 1 1
1 1 1
```

making

$$18(n^4 - 10n^3 + 33n^2 - 36n)$$

```
. 2 1
1 2 .
2 . 1
1 . 2
```

contributing

$$9(n^4 - 8n^3 + 21n^2 - 18n)$$

and

```
2 1 .
1 . 2
. 2 1
1 1 1
```

giving $12(n^4 - 9x^3 + 27n^2 - 27)$

with a common factor

$$\frac{288}{(n-1)^2(n-2)^2(n-3)^2}$$

If you can let me know where you would diverge from this we can run the discrepancy down with certainty,

Yours sincerely,