

MAA Metro NY Problem of the Month

October 2026

Establish that the coefficient of x^k in the expansion of e^{e^x} is given by $\sum_{j=1}^{\infty} \frac{j^k}{j!k!}$ and deduce the exact value of $\sum_{j=1}^{\infty} \frac{j^5}{j!}$.

Computer or AI assisted/generated solutions will not be accepted. Please send your solution to maanyproblems@gmail.com, including your name (your given name first) and school affiliation if applicable. Solutions are due on October 31.