$$1 + x + \frac{x^2}{2} \cdot -1 + \frac{x^3}{6} \cdot -1 + \frac{x^4}{24} + \frac{x^5}{120} + \frac{x^6}{720} \cdot -1 + \frac{x^7}{5040} \cdot -1 + \frac{x^8}{40320}$$