Name: _____

Choose D for "None of these"

45. Generate the Maclaurin Series for $\cosh x$.

    A. $\sum_{k=0}^{\infty}(-1)^k \frac{x^{2k+1}}{(2k+1)!}$

    B. $\sum_{k=0}^{\infty} \frac{x^{2k}}{(2k)!}$

    C. $\sum_{k=0}^{\infty} \frac{x^k}{(k+1)!}$

46. Find a power series converging to $x \cos x$.

    A. $\sum_{k=0}^{\infty}(-1)^k \frac{x^{2k+1}}{(2k)!}$

    B. $\sum_{k=0}^{\infty}(-1)^k \frac{x^{2k}}{(2k+2)!}$

    C. $\sum_{k=0}^{\infty} \frac{x^{2k+2}}{(2k+1)!}$

47. Find a power series converging to $\frac{d}{dx}[\sin(x^2)]$.

    A. $\sum_{k=0}^{\infty} \frac{(-x^2)^{4k+3}}{(4k+2)(2k)!}$

    B. $\sum_{k=0}^{\infty} \frac{(2k+1)x^{2k+2}}{(2k+1)!}$

    C. $\sum_{k=0}^{\infty}(-1)^k \frac{(4k+2)x^{4k+1}}{(2k+1)!}$