## Taylor polynomials

## Question

In each example below, we give an estimate for some quantity. Which one would most likely not be a good estimate? (Why?)
A. Estimate $e$ by $1+1+1 / 2+1 / 6$.
B. Estimate $\sin (2)$ by $2-2^{3} / 3!+2^{5} / 5$ !
C. Estimate $\arctan (2)$ by $2-2^{3} / 3+2^{5} / 5-2^{7} / 7$.
D. Estimate $\ln (1.5)$ by $0.5-0.5^{2} / 2+0.5^{3} / 3-0.5^{4} / 4+0.5^{5} / 5$.

