

1. Find the Taylor series for $\frac{1}{x}$ at $x = 2$ using the definition of a Taylor series.

2. Find a Maclaurin series for $f(x) = x^2 \ln(1 + x^3)$ by using $\ln(1 + x) = \sum_{n=1}^{\infty} \frac{(-1)^{n-1} x^n}{n}$.

Q: When can you add two to eleven and get one as the correct answer?