

Q1) If $f(x) = \ln(x + \ln x)$, find $f'(1)$.

Q2) If $\frac{d}{dx}[f(2x)] = x^2$, find $f'(x)$.

Q3) Evaluate: $\lim_{x \rightarrow 1} \frac{(\cos \pi x)^{18} - 1}{x - 1}$.