

Q. (A) Use L' Hopital Rule to evaluate  $\lim_{t \rightarrow \infty} \frac{\ln(3t)}{t^2}$

It's  $\frac{\infty}{\infty}$  form, as  $t \rightarrow \infty$ .

$$\lim_{t \rightarrow \infty} \frac{\ln(3t)}{t^2} = \lim_{t \rightarrow \infty} \frac{1}{2t} = 0$$