

TIPS AND TRICKS

INEQUALITY BASED QUESTIONS

1. If we need to prove $f(x) > g(x)$ then, take $g(x) = f(x) - g(x)$
2. Now, check $g(x)$ is increasing or decreasing.
3. Draw rough graph to understand behavior of $h(x)$
4. If $h(x)$ is increasing in (a,b) . In (a,b) , $h(x) < h(b)$ and $h(x) > h(a)$.

The behavior of the inverse function is the same as its basic function.

Normally to decide Monotonic Behavior in Functions of type u/v , differentiate it.

Take, numerator = $h(x)$, use method of inequality with $h(x)$.