

Quiz - 1

1. Let  $M, N$  be smooth manifolds and  $f: M \rightarrow N$  be a smooth map. Prove that  $f$  is continuous. (3)

2. Let  $M, N$  be smooth manifolds,  $f: M \rightarrow N$  be a constant map. Does this imply  $Df(p): T_p M \rightarrow T_{f(p)} N$  is zero? Explain. (3)

