January 26, 2009

Calculus II : Quiz 1

Name

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1) Let $f(x) = xsin(\frac{x}{2}),\ \ 0 \leq x \leq \pi$.

a) Show that the inverse function $f^{-1}(x)$ exists.

b) Find the range of $f^{-1}(x)$.

c) Find $f^{-1}(f(\frac{\pi}{2}))$.

d) Find $(f^{-1})'(\frac{\pi}{2\sqrt{2}})$.