Homework for Monday

Mr. Neeman. 10B, October 27, 2011.

Remember that in some cases the answer can be "there are no none," in which case you need to show there are none. This is just like with other functions (e.g. if $f(x) = x^2$, then -2 doesn't have any preimages), or how some equations don't have any solutions.

#1. Suppose $f(x) = \cot x$. Find the preimages of 3.

#2. Suppose $f(x) = \cos x$. Find the preimages of 0 in the interval $[-720°, 0°]$.

#3. Suppose $f(x) = \sec x$. Find the preimages of $\frac{1}{2}$ in the interval $[0, \pi]$.

#4. Suppose $f(x) = \csc x$. Find the preimages of -2 in the interval $[-\pi, \pi]$.

#5. Suppose $f(x) = \cos x$. Find the preimages of $\frac{1}{5}$.