Quiz 1
Math 336, Winter '00

Give the definition of uniform convergence. (5 points)

Following are three sequences of functions $f_n : (0, \pi) \to \mathbf{R}$. Two converge pointwise, and one converges uniformly. Indicate which sequence does which. (5 points)

(1) $f_n(x) = \dfrac{\sin x}{n}$.

(2) $f_n(x) = \dfrac{1}{n \sin x}$.

(3) $f_n(x) = \sin(nx)$.

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