963-53-174 **Henry C. Wente*** (`hwente@math.utoledo.edu`), Department of Mathematics, The University of Toledo, 2801 West Bancroft Street, Toledo, OH 43606-3390. *Explicit Solutions to the H-Surface Equation on Tori.*

The H-surface equation $\Delta x = 2H(x_u \wedge x_v)$ is meaningful on any Riemann surface. We construct explict solutions to this equation on a torus of any conformal type. These solutions solve a minimization problem, are actually embedded surfaces of revolution and can be represented via elliptic integrals. The immersions are not conformal and so do not represent cmc surfaces. (Received January 22, 2001)