## 1023-54-1293

Okan Gurel\* (protein@attglobal.net), 630 First Avenue, New York, NY 10016, and Demet Gurel, 27-33 West 23 Street, New York, NY 10010. Tessellation of Klein Bottle by Congruence (mod 6) and Theorems of Fermat (1640) and Joncourt (1762). Preliminary report.

Organization of congruent (mod 6) prime numbers in 1D (linear), as expanding in the orthogonal direction, thus 2D (planar), places prime numbers under residue classes 1 and 5 symmetrically with respect to the residue class 3. Also, the triangular numbers of Fermat form a mirror symmetry (reflection) with respect to the direction 1. The product of residue classes 1 through 5 (Fermat's (1640) Theorem) can be calculated as additions of triangular numbers by Joncourt's (1762) Theorem 9 (Proposition VI). The rotational symmetry by 90 degrees of the template of triangular numbers identifies 23 as the smallest prime, and 20 as the largest nonprime corresponding to the residue class 2. A translational group flanked by two cobordant rotational groups is the icosahedron, the Klein bottle. References are: Abstracts of AMS [1003-54-122]2005; Elie de Joncourt, De natura et praeclaro usu simplicissimae speciei numerorum trigonalium, Hagea Comitum: apud M Husson, 1762. (Received September 25, 2006)