

1046-I1-751 **Dean J Caffentzis*** (deanandcarole@verizon.net), 5005 Lillilea Lane, New Port Richey, FL
34653. *Geometric Representations of a 4x4 determinant*. Preliminary report.

Using (abcd/efgh/ijkl/mnop) as rows 1..4 respectively, the following maps define the 4x4 determinant.

Map Ia. (tuvw/uvwt/vwtu/wtuv), where t= -ankh,u= ebol,v= -ifcp,w= mjgd

Map Ib. (t'zyx/xt'zy/yxt'z/zyxt'), where x= -dejo,y= chin,z= -bglm,t'= afkp

Map II. (wxzy/xwyz/yzxw/zywx), where w= -afol,x= -ebkp,y= -dgin,z= -chjm

Map III. (ybcz/ezyh/iyzl/znoy), where y= -ajgp,z= -dfkm

Map IVa. (tvwu/uwvt/vtuvw/wutv), where t= ajoh,u= dkne,v= pgbi,w= mfcl

Map IVb. (xt'zy/zyxt'/yzt'x/t'xyz), where x= agln,y= dfio,z= pjec,t'= mkhb

Map V. (ayzd/zfgy/yjkz/mzyp) where y= -bohi,z= -clne

total n! terms of the determinant = 24. (Received September 12, 2008)