AN EVEN SIMPLER PROOF OF PASCAL'S HEXAGON THEOREM

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We give an even shorter, simpler, and more elegant proof than [vY] of:

Pascal's Theorem: *If the vertices of a hexagon lie on a circle and the three pairs of opposite sides intersect, then the three points of intersection are collinear.*

Proof: Type `maple` (CR), and then[3] the following:

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with(geometry):  for i from 0 to 5 do point(A.i,cos (t.i),sin(t.i)) od:
for i from 0 to 2 do line(L.i,[A.i,A.(i+1)]):line(M.i,[A.(i+3) ,A.(i+4 mod 6)]):
point( P.i,coordinates(inter(L.i,M.i))):od:triangle(T,[P0,P1,P2]):evalb(simplify(area(T))=0);
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Reference

[vY] J. van Yzeren, *A simple proof of Pascal's theorem*, Amer. Math. Monthly **100**(1993) 930-931.

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[3] Inserting `cos:=proc(t):(t+1/t)/2:end:  sin:=proc(t):(t-1/t)/2/I:end:` at the beginning will speed up the computation twenty-fold.