

1053-05-88

Arash Asadi and **Luke Postle*** (lpostle@math.gatech.edu), 2735 Defoors Ferry Rd, Atlanta, GA 30318, and **Robin Thomas**. *Sub-Exponentially Many 3-Colorings of Triangle-Free Planar Graphs*.

Thomassen conjectured that every triangle-free planar graph has exponentially many 3-colorings. He proved that it has at least $2^{n^{1/12}/20000}$ distinct 3-colorings where n is the number of vertices. We show that it has at least $2^{\sqrt{n/432}}$ distinct 3-colorings. (Received August 20, 2009)