1106-05-163   **Joseph Kung*** (`kung@unt.edu`), 4563 Coyote Point, Denton, TX 76208-3238, and **Gordon Royle**. *Graphs whose flow polynomials factor have only integer roots.*

We determine all the graphs whose flow polynomials have only integer roots. These graphs are exactly those graphs with cocycle matroids isomorphic to cycle matroids of chordal graphs with no $M(K_5)$-restrictions. As the flow polynomial of a planar graph is the chromatic polynomial of its dual graph, we have also determined all planar graphs whose chromatic polynomials have only integer roots. The proof is a conceptual one (requiring some easy inequalities for coefficients of polynomials with only real roots and some matroid theory). (Received August 03, 2014)