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A Markoff number is a natural number that appears in an integer solution to the Markoff equation

$$x^2 + y^2 + z^2 = 3xyz.$$

We first recall a parametrization of Markoff numbers by Farey fractions, due essentially to Frobenius, and prove some congruence properties of Markoff numbers. These congruences can only be formulated by using this particular parametrization.

Our motivation of looking at this parametrization comes from a conjectural behavior of the (regularized) values of the elliptic modular  $j$ -function at real quadratic numbers. (Received December 12, 2011)