Let $A$ denote the set of Newman polynomials, $\sum c_i x^i, c_i \in \{0, 1\}$. Which integers $m$ may be written as $m = \frac{p(3)}{q(3)}$, where $p, q \in A$? How often can this happen? Interesting questions arise under the restrictions $q | p$ and $\frac{p}{q} \in A$. This problem arises in the study of the Cantor set, in ongoing research projects of the speaker with Katie Anders, Jayadev Athreya and Jeremy Tyson. (Received August 01, 2015)