

1135-O5-606

**Brian S Chen\*** ([a.tutor@me.com](mailto:a.tutor@me.com)), 13256 Ramona Blvd, Baldwin Park, CA 91706. *Divisibility Rules and Proofs: K-12 and Beyond.*

Rigorous math requires rigorous proofs, but what if we change the divisibility rules a bit? From planting orderly forests to utilizing year I algebra to calling on mathematical induction to using synthetic division. All students from K-12 can participate in logical, mathematical proofs when it comes to certain, though possibly reworded, divisibility rules. (Received September 10, 2017)