

Competition Corner: Bound the Claim

g11_u01_w02

Safe boundary: fictional paper data only.

1. A value is computed from (8.00 ± 0.04) and (2.00 ± 0.03) . Calculate the quotient and a conservative relative-uncertainty estimate. Which unlisted source could still matter?
2. A result agrees with a reference but has broad scatter. Explain how it can be accurate in one limited sense without being precise.
3. A graph has a steep slope and a shallow slope. For the same vertical reading uncertainty, which gives a smaller inferred horizontal uncertainty? Explain with $\Delta x = \Delta y/m$.