

ZMATH 2007e.00285

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Pentimals: or why 10 is a better base than 5.

Aust. Math. Teach. 60, No. 4, 20-24 (2004).

Summary: Bases such as 5 and 12 provide the same structural place value benefits as base 10. However, when numbers less than one are concerned, base 10 provides friendly decimals for the most common fractions of half, quarter, three-quarters. Base 5 is not user friendly at all in this regard. Base 12 would provide nice *dozenimals*(?) for the same fractions, but not for the commonly used tenths or fifths. Of course, it may be that the reason these are the commonly used fractions is that they do match base 10 so well. However, the conclusion drawn here is that the wisdom of the mathematicians like Lagrange and Laplace, even when compelled to oppose political forces, is vindicated and we have, for practical purposes, a number system which stands up strongly to scrutiny. (ERIC)

Classification: F40 F60

Keywords: number systems; computation; number representations; number bases