

**ZMATH 2014d.00511**

**O'Reilly, Declan**

**No sign of the numbers!**

Math. Sch. (Leicester) 43, No. 1, 2-3 (2014).

From the text: *D. Küchemann* ["Positive and negative numbers", in: K. Hart (ed.), *Children's understanding of mathematics*: 11–16. London: John Murray. 82–87 (1981)] has written about the difficulties of creating models for integers that are consistent across the four arithmetic operations. He advocates adopting a model "in which the integers are regarded as discrete entities or objects, constructed in a way that the positive integers cancel out the negative integers." My aim in this paper has been to put forward such a model. In doing so, I have adopted a shorthand notation, replacing  $+1$  by "+" and  $-1$  by '-'. Of course, in doing so, I can be accused of abusing standard notation. I acknowledge this. However, I would point out that almost all textbooks do something similar; instead, of writing  $-3$ , they write  $-3$  and so on. In other words, they leave out the signs whereas I leave out the numbers!

*Classification:* F40

*Keywords:* integers; alternative notation; arithmetic operations; negative numbers