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School mathematics is largely useless for learning physics. But it needn't be.¹

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Physics educators often see mathematics as a toolbox for solving problems. This view fits naturally with the mathematics that most U.S. school teachers teach and that most students learn—meaningless rituals for getting answers. The two perspectives combine to make mathematics largely useless for learning physics. I will argue that a deep emphasis on ideas of quantity in school mathematics, and greater attention to the requirements of quantitative reasoning in physics, would benefit both math education and physics education greatly.

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