

## EDITORIAL

Dear *Crux* readers,

Have you seen this puzzle before?

You have 12 marbles and an old-fashioned balance scale in front of you. One of the marbles is heavier than the others. Can you figure out which one if you are allowed to use the scales only three times? What if you know that one marble is different, but don't know whether it is heavier or lighter than the other 11 marbles? Can you find the different marble by using the scales only three times?

What is so special about this problem? I personally enjoy its accessibility: to solve it, you only need to know how a balance scale works. In a sense, this is problem solving in its purest form.

Starting with this issue, I am happy to introduce to *Crux* some materials with a slightly different flavour. Through examples and exercises, we will introduce an area of mathematics that our readers probably have not seen before – in this issue, we shall begin with Ramsey's theory. Building anything from the ground up is always an adventure and I hope you enjoy this kind of exploration into mathematics.

I am also glad to feature an excerpt from Richard Hoshino's "The Math Olympian" (*Crux* intends to review the book; meanwhile, we will present a few excerpts) as well as our ever-popular regular sections.

We at the CMS are working hard to eliminate the journal's backlog; however, the editorial transitions and administrative issues have caused some recent delays. Be assured that we are handling it and the production will soon be back on track.

As usual, do not hesitate to contact me directly at [crux-editors@cms.math.ca](mailto:crux-editors@cms.math.ca).

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