

COLLOQUY

Longtime contributor **DON HAUPTMAN** writes: I am seeking a hard copy of the previous issue (May 2017). If you have one that you're willing to part with, please send me your asking price: donhauptman@nyc.rr.com.

ALAN FRANK wrote that he "found the Bilingual Palindromic Dictionary amazing. With regard to the eponyms list, Avogadro's number is more well-known than his hypothesis, and correct or standard renderings are Lot's wife, Planck's constant, Wheatstone bridge, and Zorro's mask. Personally, I find the eponyms more interesting than the mere possessions such as Banquo, Mary, and Zorro.

I also played around with the atomic formulas. Some of my results are in the attachment [below], which I did not think would survive native e-mail very well.

I came up with a few interesting atomic expressions. I started the first two by looking for elements with numbers divisible by 34 and 8 and the last one looking for one with a name ending with NIUM so that the sevens would cancel.

$$\begin{aligned}(14 - 15 + 2) \times (12 - 9) \times (21 + 13) \\ (3 + 21) / 18 \times 9 \times (21 - 13) \\ (14 \times 5) - \sqrt{16} (20 - 21) + 14 \times 9 / 21 + 13\end{aligned}$$

If you allow factorials, as I have generally seen in the rules for similar puzzles, 79 can be expressed as $7 + (15 - 12) \times 4!$.

I came close on some others. 86 is the limit of

$$\begin{aligned}18 \times (1 + 4) - \sqrt{15 + 14} \\ 18 \times (1 + 4) - \sqrt{15 + \sqrt{14}} \\ 18 \times (1 + 4) - \sqrt{15 + \sqrt{\sqrt{14}}} \\ \cdot \\ \cdot \\ \cdot\end{aligned}$$

Given the equations below, one would expect XENON to be solvable.

$$\begin{aligned}-24 + 5 \times (-14 + 15 - 14) &= 51 \\ -24 - 5! + 14 \times 15 - 14 &= 52 \\ -24 + 5! - 14 - 15 - 14 &= 53 \\ 24 + 5 + 14 + 15 - \sqrt{14} &\approx 54.3 \\ 2.4 \times 5 + 14 + 15 + 14 &= 55\end{aligned}$$