

Quiz 16, March 1, 2016

Write the repeating decimal $1.42\overline{973} = 1.42973973973\dots$ as the ratio of two integers.

Let $r = 1.42973973973\dots$. We see that $1000r - r = 1428.31$. Thus, $999r = 1428.31$ and

$$r = \frac{1428.31}{999} = \frac{142831}{99900}.$$