

## MA416 Weekly Challenge 10

Give an example (with explanation) of a non-principal ideal in the ring  $R$  of Lecture 17. The elements of  $R$  are polynomials in  $\mathbb{Q}[X]$  whose constant term is an integer.

Please upload your answer to the Canvas “Challenge 10” assignment by Friday November 29. You do not need to type it (a photograph is fine). Explain your example as clearly as you can, so that it would be interesting and informative for a reader. Cite any sources that you use.