

MA416 Weekly Challenge 6

Give an example of a proper non-zero two-sided ideal of the ring $M_2(\mathbb{Z})$.

Please upload your answer to the Canvas “Challenge 6” assignment by Friday November 15. 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.