## WEEK 1 HOMEWORK

## JAIDYN JOHNSTON

Hi! I'm Jay (or Jaidyn - I really don't mind), and I'm really excited to be taking MATH1115! I've always really enjoyed building up to new concepts in maths from somewhere more fundamental, and it sounds like that is exactly what we will be doing. I also have always found the idea of proving seemingly obvious statements from fundamental axioms really interesting, and am glad to finally be able to learn about this formally.

$$z_{n+1} = z_n^2 + c$$

$$\begin{bmatrix} \frac{1}{\sqrt{2}} & \frac{1}{\sqrt{2}} \\ \frac{1}{\sqrt{2}} & \frac{-1}{\sqrt{2}} \end{bmatrix}$$

$$\begin{pmatrix}
1 & 0 & 0 & 0 \\
0 & 1 & 0 & 0 \\
0 & 0 & 1 & 0
\end{pmatrix}$$

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