## Group 7

## Axel Abrica, Yu Fan Mei, Abby Porter Introduction to Proof and Problem Solving

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**Problem 1.** Show that  $\lim_{x\to 1} 8/(x^2+1) = 4$ .

*Proof.* Let  $\epsilon_0$  be any real number greater than 0. Set  $\delta_0 = \min\{1, b\}$ . Let  $x_0$  be any real number such that  $0 < |x_0 - 1| < \delta$ .

While working on this proof, I received no external assistance aside from advice from Professor Mehmetaj.