## MHF 3202, Dr. Block, Problem Set 1, due 3-18-2020

1. Suppose that $t$ is a real number. Prove that there exists a real number $w$ such that $\frac{w+1}{w-2}=t$ if and only if $t \neq 1$.
2. Prove that for every $\epsilon>0$ there exists $\delta>0$ such that if $x \in \mathbb{R}$ and $|x-3|<\delta$, then $\left|x^{2}-5 x+6\right|<\epsilon$.
