Math 3325 **PRINCIPLES OF MATH** Fall 2019
Dr. Duval **Homework 3**
due Thursday, September 19

1. Let x, y, z be real numbers such that $10 \leq w \leq x \leq y \leq z \leq 30$. Prove that $x - w \leq 7$, $y - x \leq 7$, or $z - y \leq 7$.

2. Prove that for any $\epsilon > 0$ there exists a $\delta > 0$ such that: if x is a real number and $0 < x < \delta$, then $x^2 < \epsilon$.