**Quiz 3 Math 382 Name:**

***Prove the following:***

1. Let $I=[a,b]$ closed and bounded interval. If $f:I\rightarrow R$ is continuous, then $f$ is bounded. (Theorem 6.4).
2. $p\left(x\right)=x^{7}-5x^{4}+25x-7$ has a solution in $R.$