TEST 2
Mock Exam

1- Prove by contrapositive that if n is an integer and 3n+2 is even then n is even

2- Prove that if n is an integer, then if n is odd then 5n+6 is odd

3- $\neg p \wedge q$
   $r \rightarrow p \wedge \neg q$
   $\neg r \rightarrow s$
   $s \rightarrow t$
   $\neg s$
   —————————
   $\therefore \neg t \rightarrow r$

4- Let a,b $\in$ Z and n $\in$ N, prove that if (a-b) is divisible by n then $(a^2 - b^2)$ is divisible by n

5- Show that if $x^2 + x - 6 \geq 0$ then $x \geq 2$ or $x \leq -3$