Execise 6

Theorem: A classic unsolved problem in number theory asks if there are infinitely many pairs of "twin primes", pairs of primes separated by 2, such as 3 and 5, 11 and 13, or 71 and 73. Prove that the only prime triple (i.e. three primes, each 2 from the next) is 3, 5, 7.

Proof: This theorem is partly proofed by assignment five. It states that for any integer n at least one of n, $n+2$, $n+4$ is divisble by 3. But since a prime is only divisble by himself or by 1, there can´t exist any triple prime, other than $3, 5, 7$.