

Math 301**Quiz 6**

10 points possible.

1. (3 pts.) Use the Euclidean algorithm to find the greatest common divisor of 3500 and 1960, by "hand," showing the divisions you perform.

2. (3 pts.) Transform the summation $\sum_{i=1}^{n+1} (n - i + 1)$ by making the change of variable $j = i - 1$.

3. (4 pts.) Prove that $\sqrt{5}$ is irrational.

(You may use Exercise 11 from Section 3.6: For all integers n and all primes p , if n^2 is divisible by p , then n is divisible by p .)