**Homework 4**

*Due Thursday October 5th*

**1)** Factor the number n using the p – 1 factoring method, where

n = 190 248 273 382 547 686 244 479 775 579 416 295 505 415 044 511.

Here n=pq, where p and q are prime and p-1 is 37-smooth.

**p = 3998863619724381409**

**q = 47575584334546623464185354879**

**2)** Find the smallest safe prime p > 3x1015 + 11. [Only test p of the form 12k + 11.]

**k = 250000000000143**

**p = 3000000000001727**