

MATH. 104A, HOMEWORK 6 (DUE 11/8)

Do the following questions from the textbook:

Sect. 3.4: # 6, 8

Sect 3.5: # 2, 3, 9

In addition, do the following problems:

(1) Show that if $p > 5$ is prime, then $(p-1)!+1$ has 2 distinct prime factors. (Note that if $p = 5$, then $(p-1)!+1 = 25 = 5^2$, so the assumption that $p > 5$ is necessary).

(2a) Find all n such that $\phi(n) = 3$.

(b) Find all n such that $\phi(n) = 4$.