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 $\phi(n) = 4$. 