**1)** Find the inverse modulo 17 of 5. That is, find 5-1 (mod 17).

**2)** Find 9×5-1 (mod 17).

**3)** Find C(pq), where p = 13, and q = 19.

Here C(n) is the Carmichael function, named after Robert D. Carmichael.

**4)** Find (pq), where p and q are as in problem 3.

Here φ(n) is Euler’s totient function.

**5)** Go through the steps of the recursive function f(a, b, c) ≡ ab (mod c) in the lecture notes with the example f(5, 10, 19) = 510 (mod 19).

