

HOMEWORK ASSIGNMENT # 8
Due Thursday, April 1

Do the following problems:

1. Problem 5 in §7.5 of Trappe-Washington.
2. Problem 4 in §7.6 of Trappe-Washington.
3. Problem 4 in §8.6 of Trappe-Washington.
4. Problems 2,3 in §8.7 of Trappe-Washington.
5. Problems 2,3 in §11.3 of Trappe-Washington.
6. Use the congruences

$$\begin{aligned} 17^{3513} &\equiv 2^3 \cdot 3 \cdot 5^2 \pmod{p} \\ 17^{993} &\equiv 2^4 \cdot 3 \cdot 5^2 \pmod{p} \\ 17^{1311} &\equiv 2^2 \cdot 3 \cdot 5 \pmod{p} \end{aligned}$$

to find a solution to $17^x \equiv 5 \pmod{p}$.