2.4 Construct the prime field $GF(11)$ with modulo-11 addition and multiplication. Find all the primitive elements, and determine the orders of other elements.

2.14 Construct a table for $GF(2^5)$ based on the primitive polynomial $p(X) = 1 + X^2 + X^5$. Let α be a primitive element of $GF(2^5)$. Find the minimal polynomials of α^3 and α^7.

2.17 Let α be a primitive element in $GF(2^4)$. Use Table 2.8 to find the roots of $f(X) = X^3 + \alpha^6 X^2 + \alpha^9 X + \alpha^9$.

2.19 Let α be a primitive element in $GF(2^4)$. Use Table 2.8 to solve the following simultaneous equations for X, Y, and Z:

$$\begin{aligned} X + \alpha^5 Y + Z &= \alpha^7, \\ X + \alpha Y + \alpha^7 Z &= \alpha^9, \\ \alpha^2 X + Y + \alpha^6 Z &= \alpha. \end{aligned}$$