

Z_2 :

2:

$$x^2 + x + 1$$

3:

$$x^3 + x^2 + 1 \quad x^3 + x + 1$$

4:

$$x^4 + x^3 + 1 \quad x^4 + x + 1 \quad x^4 + x^3 + x^2 + x + 1$$

Z_3 :

2:

$$\begin{array}{cccc} x^2 + 1 & 2x^2 + x + 1 & 2x^2 + 2x + 1 & 2x^2 + 2 \\ x^2 + x + 2 & x^2 + 2x + 2 & & \end{array}$$

3:

$$\begin{array}{cccc} x^3 + 2x^2 + 1 & 2x^3 + 2x^2 + 1 & 2x^3 + x + 1 & 2x^3 + x^2 + x + 1 \\ x^3 + 2x^2 + x + 1 & x^3 + 2x + 1 & x^3 + x^2 + 2x + 1 & 2x^3 + 2x^2 + 2x + 1 \\ x^3 + x^2 + 2 & 2x^3 + x^2 + 2 & 2x^3 + x + 2 & x^3 + x^2 + x + 2 \\ 2x^3 + 2x^2 + x + 2 & x^3 + 2x + 2 & 2x^3 + x^2 + 2x + 2 & x^3 + 2x^2 + 2x + 2 \end{array}$$

4:

$$\begin{array}{cccc} 2x^4 + x^3 + 1 & 2x^4 + 2x^3 + 1 & 2x^4 + x^2 + 1 & x^4 + x^3 + x^2 + 1 \\ x^4 + 2x^3 + x^2 + 1 & 2x^4 + 2x^2 + 1 & 2x^4 + x + 1 & x^4 + 2x^3 + x + 1 \\ x^4 + x^2 + x + 1 & x^4 + x^3 + x^2 + x + 1 & 2x^4 + 2x^3 + x^2 + x + 1 & 2x^4 + 2x^3 + 2x^2 + x + 1 \\ 2x^4 + 2x + 1 & x^4 + x^3 + 2x + 1 & x^4 + x^2 + 2x + 1 & 2x^4 + x^3 + x^2 + 2x + 1 \\ x^4 + 2x^3 + x^2 + 2x + 1 & 2x^4 + x^3 + 2x^2 + 2x + 1 & x^4 + x^3 + 2 & x^4 + 2x^3 + 2 \\ x^4 + x^2 + 2 & x^4 + 2x^2 + 2 & 2x^4 + x^3 + 2x^2 + 2 & 2x^4 + 2x^3 + 2x^2 + 2 \\ x^4 + x + 2 & 2x^4 + 2x^3 + x + 2 & x^4 + 2x^3 + x^2 + x + 2 & 2x^4 + 2x^2 + x + 2 \\ 2x^4 + x^3 + 2x^2 + x + 2 & x^4 + 2x^3 + 2x^2 + x + 2 & x^4 + 2x + 2 & 2x^4 + x^3 + 2x + 2 \\ x^4 + x^3 + x^2 + 2x + 2 & 2x^4 + 2x^2 + 2x + 2 & x^4 + x^3 + 2x^2 + 2x + 2 & 2x^4 + 2x^3 + 2x^2 + 2x + 2 \end{array}$$

Z_5 :

2:

$$\begin{array}{cccc} 2x^2 + 1 & 3x^2 + 1 & x^2 + x + 1 & 2x^2 + x + 1 \\ 3x^2 + 2x + 1 & 4x^2 + 2x + 1 & 3x^2 + 3x + 1 & 4x^2 + 3x + 1 \\ x^2 + 4x + 1 & 2x^2 + 4x + 1 & x^2 + 2 & 4x^2 + 2 \\ x^2 + x + 2 & 3x^2 + x + 2 & 2x^2 + 2x + 2 & 4x^2 + 2x + 2 \\ 2x^2 + 3x + 2 & 4x^2 + 3x + 2 & x^2 + 4x + 2 & 3x^2 + 4x + 2 \\ x^2 + 3 & 4x^2 + 3 & 2x^2 + x + 3 & 4x^2 + x + 3 \\ x^2 + 2x + 3 & 3x^2 + 2x + 3 & x^2 + 3x + 3 & 3x^2 + 3x + 3 \\ 2x^2 + 4x + 3 & 4x^2 + 4x + 3 & 2x^2 + 4 & 3x^2 + 4 \\ 3x^2 + x + 4 & 4x^2 + x + 4 & x^2 + 2x + 4 & 2x^2 + 2x + 4 \\ x^2 + 3x + 4 & 2x^2 + 3x + 4 & 3x^2 + 4x + 4 & 4x^2 + 4x + 4 \end{array}$$

3:

$x^3 + x^2 + 1$	$4x^3 + x^2 + 1$	$x^3 + 2x^2 + 1$	$4x^3 + 2x^2 + 1$
$2x^3 + 3x^2 + 1$	$3x^3 + 3x^2 + 1$	$2x^3 + 4x^2 + 1$	$3x^3 + 4x^2 + 1$
$x^3 + x + 1$	$2x^3 + x + 1$	$3x^3 + x^2 + x + 1$	$4x^3 + x^2 + x + 1$
$x^3 + 3x^2 + x + 1$	$4x^3 + 3x^2 + x + 1$	$x^3 + 4x^2 + x + 1$	$3x^3 + 4x^2 + x + 1$
$x^3 + 2x + 1$	$3x^3 + 2x + 1$	$3x^3 + x^2 + 2x + 1$	$4x^3 + x^2 + 2x + 1$
$2x^3 + 2x^2 + 2x + 1$	$3x^3 + 2x^2 + 2x + 1$	$2x^3 + 4x^2 + 2x + 1$	$4x^3 + 4x^2 + 2x + 1$
$2x^3 + 3x + 1$	$4x^3 + 3x + 1$	$x^3 + x^2 + 3x + 1$	$2x^3 + x^2 + 3x + 1$
$2x^3 + 2x^2 + 3x + 1$	$3x^3 + 2x^2 + 3x + 1$	$x^3 + 4x^2 + 3x + 1$	$3x^3 + 4x^2 + 3x + 1$
$3x^3 + 4x + 1$	$4x^3 + 4x + 1$	$x^3 + x^2 + 4x + 1$	$2x^3 + x^2 + 4x + 1$
$x^3 + 3x^2 + 4x + 1$	$4x^3 + 3x^2 + 4x + 1$	$2x^3 + 4x^2 + 4x + 1$	$4x^3 + 4x^2 + 4x + 1$
$x^3 + x^2 + 2$	$4x^3 + x^2 + 2$	$2x^3 + 2x^2 + 2$	$3x^3 + 2x^2 + 2$
$x^3 + 3x^2 + 2$	$4x^3 + 3x^2 + 2$	$2x^3 + 4x^2 + 2$	$3x^3 + 4x^2 + 2$
$3x^3 + x + 2$	$4x^3 + x + 2$	$2x^3 + 2x^2 + x + 2$	$4x^3 + 2x^2 + x + 2$
$x^3 + 3x^2 + x + 2$	$2x^3 + 3x^2 + x + 2$	$x^3 + 4x^2 + x + 2$	$4x^3 + 4x^2 + x + 2$
$2x^3 + 2x + 2$	$4x^3 + 2x + 2$	$2x^3 + x^2 + 2x + 2$	$3x^3 + x^2 + 2x + 2$
$x^3 + 2x^2 + 2x + 2$	$3x^3 + 2x^2 + 2x + 2$	$x^3 + 3x^2 + 2x + 2$	$2x^3 + 3x^2 + 2x + 2$
$x^3 + 3x + 2$	$3x^3 + 3x + 2$	$2x^3 + x^2 + 3x + 2$	$3x^3 + x^2 + 3x + 2$
$2x^3 + 2x^2 + 3x + 2$	$4x^3 + 2x^2 + 3x + 2$	$3x^3 + 3x^2 + 3x + 2$	$4x^3 + 3x^2 + 3x + 2$
$x^3 + 4x + 2$	$2x^3 + 4x + 2$	$x^3 + 2x^2 + 4x + 2$	$3x^3 + 2x^2 + 4x + 2$
$3x^3 + 3x^2 + 4x + 2$	$4x^3 + 3x^2 + 4x + 2$	$x^3 + 4x^2 + 4x + 2$	$4x^3 + 4x^2 + 4x + 2$
$2x^3 + x^2 + 3$	$3x^3 + x^2 + 3$	$x^3 + 2x^2 + 3$	$4x^3 + 2x^2 + 3$
$2x^3 + 3x^2 + 3$	$3x^3 + 3x^2 + 3$	$x^3 + 4x^2 + 3$	$4x^3 + 4x^2 + 3$
$3x^3 + x + 3$	$4x^3 + x + 3$	$x^3 + x^2 + x + 3$	$4x^3 + x^2 + x + 3$
$x^3 + 2x^2 + x + 3$	$2x^3 + 2x^2 + x + 3$	$2x^3 + 3x^2 + x + 3$	$4x^3 + 3x^2 + x + 3$
$2x^3 + 2x + 3$	$4x^3 + 2x + 3$	$x^3 + 2x^2 + 2x + 3$	$2x^3 + 2x^2 + 2x + 3$
$x^3 + 3x^2 + 2x + 3$	$3x^3 + 3x^2 + 2x + 3$	$2x^3 + 4x^2 + 2x + 3$	$3x^3 + 4x^2 + 2x + 3$
$x^3 + 3x + 3$	$3x^3 + 3x + 3$	$3x^3 + 2x^2 + 3x + 3$	$4x^3 + 2x^2 + 3x + 3$
$2x^3 + 3x^2 + 3x + 3$	$4x^3 + 3x^2 + 3x + 3$	$2x^3 + 4x^2 + 3x + 3$	$3x^3 + 4x^2 + 3x + 3$
$x^3 + 4x + 3$	$2x^3 + 4x + 3$	$x^3 + x^2 + 4x + 3$	$4x^3 + x^2 + 4x + 3$
$3x^3 + 2x^2 + 4x + 3$	$4x^3 + 2x^2 + 4x + 3$	$x^3 + 3x^2 + 4x + 3$	$3x^3 + 3x^2 + 4x + 3$
$2x^3 + x^2 + 4$	$3x^3 + x^2 + 4$	$2x^3 + 2x^2 + 4$	$3x^3 + 2x^2 + 4$
$x^3 + 3x^2 + 4$	$4x^3 + 3x^2 + 4$	$x^3 + 4x^2 + 4$	$4x^3 + 4x^2 + 4$
$x^3 + x + 4$	$2x^3 + x + 4$	$x^3 + x^2 + x + 4$	$3x^3 + x^2 + x + 4$
$x^3 + 2x^2 + x + 4$	$4x^3 + 2x^2 + x + 4$	$3x^3 + 4x^2 + x + 4$	$4x^3 + 4x^2 + x + 4$
$x^3 + 2x + 4$	$3x^3 + 2x + 4$	$2x^3 + x^2 + 2x + 4$	$4x^3 + x^2 + 2x + 4$
$2x^3 + 3x^2 + 2x + 4$	$3x^3 + 3x^2 + 2x + 4$	$3x^3 + 4x^2 + 2x + 4$	$4x^3 + 4x^2 + 2x + 4$
$2x^3 + 3x + 4$	$4x^3 + 3x + 4$	$x^3 + x^2 + 3x + 4$	$3x^3 + x^2 + 3x + 4$
$2x^3 + 3x^2 + 3x + 4$	$3x^3 + 3x^2 + 3x + 4$	$x^3 + 4x^2 + 3x + 4$	$2x^3 + 4x^2 + 3x + 4$
$3x^3 + 4x + 4$	$4x^3 + 4x + 4$	$2x^3 + x^2 + 4x + 4$	$4x^3 + x^2 + 4x + 4$
$x^3 + 2x^2 + 4x + 4$	$4x^3 + 2x^2 + 4x + 4$	$x^3 + 4x^2 + 4x + 4$	$2x^3 + 4x^2 + 4x + 4$

[Finished in 2.8s]