

$S_9 \pmod{3}$

	φ_1	φ_3	φ_7	φ_5	φ_{11}	φ_9	φ_2	φ_{13}	φ_{10}	φ_{15}	φ_4	φ_6	φ_8	φ_{16}
9^1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$1^1 8^1$	1	1	.	.	.	.	.	.	.	.	.	.	.	.
$2^1 7^1$	.	.	1	.	.	.	.	.	.	.	.	.	.	.
$1^2 7^1$	.	1	.	1	.	.	.	.	.	.	.	.	.	.
$3^1 6^1$	.	1	.	.	1	.	.	.	.	.	.	.	.	.
$1^1 2^1 6^1$	1	1	.	1	1	1	.	.	.	.	.	.	.	.
$1^3 6^1$	.	.	.	1	.	1	.	.	.	.	.	.	.	.
$4^1 5^1$	.	.	.	.	1	.	1	.	.	.	.	.	.	.
$1^1 3^1 5^1$	.	.	.	.	.	.	.	1	.	.	.	.	.	.
$2^2 5^1$	1	1	.	.	1	1	1	.	1	.	.	.	.	.
$1^2 2^1 5^1$	.	.	.	.	.	.	.	.	.	1	.	.	.	.
$1^4 5^1$	.	.	.	.	.	1	.	.	1	.	.	.	.	.
$1^1 4^2$	.	.	.	.	1	1	1	.	.	.	1	.	.	.
$2^1 3^1 4^1$	.	1	.	1	1	1	1	.	1	.	1	1	.	.
$1^2 3^1 4^1$	.	.	.	.	.	.	.	.	.	1	.	.	1	.
$1^1 2^2 4^1$	.	.	1	.	.	.	.	.	.	.	.	.	.	1
$1^3 2^1 4^1$	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$1^5 4^1$	.	.	.	.	.	.	.	.	1	.	.	1	.	.
3^3	.	.	.	1	.	.	.	.	.	.	.	1	.	.
$1^1 2^1 3^2$	1	1	.	1	.	1	.	.	1	.	1	1	.	.
$1^3 3^2$	1	.	.	.	.	1	1	.	1	.	1	.	.	.
$2^3 3^1$	1	1	.	.	.	.	.	.	1	.	.	.	.	.
$1^2 2^2 3^1$	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$1^4 2^1 3^1$	.	.	.	.	.	.	1	.	1	.	1	1	.	.
$1^6 3^1$	.	.	.	.	.	.	.	.	.	.	1	1	.	.
$1^1 2^4$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$1^3 2^3$	.	.	.	.	.	.	.	.	.	.	1	.	.	.
$1^5 2^2$	.	.	.	.	.	.	.	.	.	.	.	.	1	.
$1^7 2^1$	.	.	.	.	.	.	1	.	.	.	1	.	.	.
1^9	.	.	.	.	.	.	1	.	.	.	.	.	.	.

	φ_{12}	φ_{14}
9^1	.	.
$1^1 8^1$.	.
$2^1 7^1$.	.
$1^2 7^1$.	.
$3^1 6^1$.	.
$1^1 2^1 6^1$.	.
$1^3 6^1$.	.
$4^1 5^1$.	.
$1^1 3^1 5^1$.	.
$2^2 5^1$.	.
$1^2 2^1 5^1$.	.
$1^4 5^1$.	.
$1^1 4^2$.	.
$2^1 3^1 4^1$.	.
$1^2 3^1 4^1$.	.
$1^1 2^2 4^1$.	.
$1^3 2^1 4^1$.	.
$1^5 4^1$.	.
3^3	.	.
$1^1 2^1 3^2$	1	.
$1^3 3^2$	1	.
$2^3 3^1$	1	.
$1^2 2^2 3^1$.	1
$1^4 2^1 3^1$	1	.
$1^6 3^1$.	.
$1^1 2^4$	1	.
$1^3 2^3$	1	.
$1^5 2^2$.	.
$1^7 2^1$.	.
1^9	.	.