Find the Remainder

What is the remainder when 3^{2001} is divided by 7?

You might like to use this table to look for any patterns that might help.

Power of 3	Equal to	Remainder when divided by 7
3^0	1	1
3^1	3	3
3^2	9	2
3^3		
3^4		
3^5	243	5
3^6		
3^7		
3^8		
3^9		
3^{10}		
3^{11}		