

Modulares Potenzieren - mögliche Lösung

$$13^{19} \bmod 47 = ((13^1 \bmod 47) \cdot (13^{18} \bmod 47)) \bmod 47$$

$$13^{18} \bmod 47 = (16^6 \bmod 47)^3 \bmod 47 = (16.777.216)^3 \bmod 47$$

$$= 2^3 \bmod 47 = 8$$

$$13^{19} \bmod 47 = (13 \cdot 8) \bmod 47 = 104 \bmod 47 = \underline{\underline{10}}$$