History of Math | Quiz

1) Guido Grandi

2) Marquise du Chatelet and Voltaire

3) Joseph Louis Lagrange

4) $\begin{pmatrix}1 & 9\\ 9 & 1\end{pmatrix}\begin{pmatrix}2 & 8\\ 8 & 2\end{pmatrix}\begin{pmatrix}3 & 7\\ 7 & 3\end{pmatrix}\begin{pmatrix}4 & 5 & 6\\ 5 & 6 & 4\end{pmatrix}$

$(19)(28)(37)(456)$

smallest i such that π^i is identity is

$\text{lcm}(2,2,2,3) = \boxed{6}$

5) It is impossible to go from the first configuration state where $(0 + 6)$ tori cob to the state where 3 and 1 are interchange since the parity is now odd $(3 + 6)$ bari cob

When we switch 3 and 1 and keep the other elements the same, the number of inversions should change by an odd integer, but the number of inversions in the first is 0 and the second state is