LECTURE 14 - Attendance Quiz

PART I

① Who were the two geniuses who proved the impossibility of a formula for solving a Quintic
- Gauss & Ruffini

② Find a way to place 31 dominos and completely cover an 8×8 square where 2 opposite corners have been removed CANNOT DO [picture at the end] ↳ creates odd number of squares on a given side

③ At what ages did the above geniuses die?
Gauss - 77 Ruffini - 57

④ What University did the most in classifying so-called simple groups? What mathematics dept. has the most faculty members w/ groups named after them? CANT FIND

PART II:

① $\begin{bmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 \\ 6 & 7 & 5 & 4 & 3 & 1 & 2 \end{bmatrix}$

② $\pi = \begin{pmatrix} 1 & 2 & 3 & 4 \\ 4 & 1 & 2 & 3 \end{pmatrix}$ $\pi^2 = \begin{pmatrix} 1 & 2 & 3 & 4 \\ 3 & 4 & 1 & 2 \end{pmatrix}$ $\pi^3 = \begin{pmatrix} 1 & 2 & 3 & 4 \\ 2 & 3 & 4 & 1 \end{pmatrix}$ $\pi^4 = \begin{pmatrix} 1 & 2 & 3 & 4 \\ 1 & 2 & 3 & 4 \end{pmatrix} = I$

③ [I DONT KNOW]

④ $\pi^{-1} = \begin{pmatrix} 3 & 1 & 2 & 5 & 4 \\ 1 & 2 & 3 & 4 & 5 \end{pmatrix}$