Day 16

Cayley's Theorem

1. "(1 2 3 4) cannot be written as a product of 3-cycles."

This statement is...
(A) True.
(B) False.

2. What is the order $(1\ 2\ 4\ 6\ 7\ 5)(3\ 8)$ in S_8?

3. Find a subgroup of a symmetric group that is isomorphic to each of the following:

(1) Z_4

(2) $U(8)$

(3) $U(9)$