

Reading Quiz §5

1. Consider the permutation σ acting on the set $A = \{1, 2, 3, 4, 5\}$ where:
 $\sigma(1) = 3$ $\sigma(2) = 2$ $\sigma(3) = 5$ $\sigma(4) = 1$ $\sigma(5) = 4$

(a) [1] Write σ as an array.

(b) [1] Write σ with cycle notation.

(c) [1] Write σ as a product of 2-cycles.

2. [1] Find $|S_5|$

3. [1] Find the order of $\alpha \in S_8$ where $\alpha = (134)(2658)(7)$