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Exercise 2 - Problems given during lectures

Problem 1 Show that for $\sigma, \tau \in \text{Sym}_n$, we have $\bar{x}(\sigma\tau) = (\bar{x}\sigma)\tau$. Exercise 36 p. 21.

Problem 2 Let S be the set of all codes over F_q of length n. Let $C_1, C_2 \in S$. Write $C_1 \sim C_2$ if C_1 and C_2 are permutation equivalent. Show that \sim is an equivalence relation on S. Exercise 37 s.21.

Problem 3	Show that $PAut(C)$ is a subgroup of Sym_n .
Problem 4	Do Exercise 39 s. 22 for $(1, 2, 3)(5, 6, 7)$.
Problem 5	See example 1.7.4., page 25 in the book. Show that γ is an automorphism.
Problem 6	Exercise 63 in the book.
Problem 7	Exercise 66 a) in the book.
Problem 8	Exercise 67 a) in the book.
Problem 9	Exercise 69 in the book.