TRENTO, 2020/21
ADVANCED GROUP THEORY
EXERCISE SHEET # 11

Exercise 11.1. Show *without* using characters that if G is a finite group, $N \trianglelefteq G$ and $x \in G$, then

$$|\, C_G(x)\,| \geq \Big|\, C_{G/N}(xN)\,\Big|\,.$$

Exercise 11.2. State and prove Burnside's formula for the product of the sums of two conjugacy classes.