# Group theory - Hand in sheet 7 

deadline: $23 / \mathrm{Nov} / 10$

1) Given a group $G$ we can define a sequence of groups $G_{i}$ as follows. We let $G_{0}=G$ and define, for $i>0$,

$$
G_{i}=G_{i-1} / Z_{G_{i-1}}
$$

Compute this sequence for $\mathbb{Z}_{n}, A_{n}(n>3), \mathbb{H}$, the quaternion group with 8 elements, $D_{10}$ and $D_{8}$.

