Example of a subgroup lattice

$C_{12} = \langle x \rangle = \langle x^1 \rangle$. Divisors of 12 : 1, 2, 3, 4, 6, 12

$\langle x^2 \rangle = \{x^2, x^4, x^6, x^8, x^{10}, x^{12} = e\}$

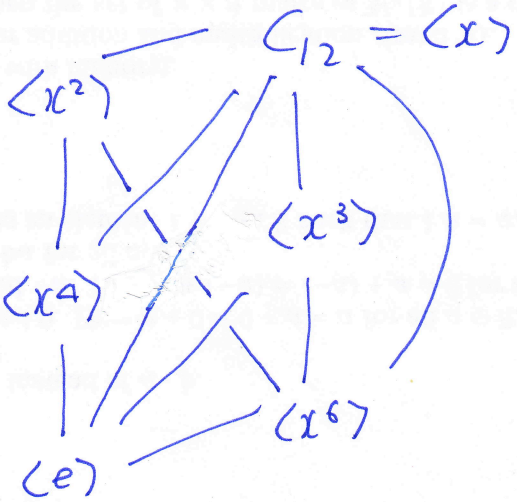
$\langle x^3 \rangle = \{x^3, x^6, x^9, x^{12} = e\}$

$\langle x^4 \rangle = \{x^4, x^8, x^{12} = e\}$

$\langle x^6 \rangle = \{x^6, x^{12} = e\}$

$\langle x^{12} \rangle = \{e\}$.

This gives



Usually we leave out "extra" edges as if $H_1 \leq H_2 \leq H_3$ it is implied that $H_1 \leq H_3$. So we don't draw an edge from $H_1 - H_3$.

Hence for C_{12} get