## Supplemental material for Visual Algebra (Math 4120), HW 5

\#2(a): Cayley graph of the semidirect product $C_{7} \rtimes C_{3}$, with the nodes labeled by the order of the elements.

$\# \mathbf{3}(\mathbf{b})$ : Cayley graph of $C_{9} \rtimes C_{3}=\langle a, b\rangle=\left\{a^{i} b^{j} \mid 0 \leq i \leq 8,0 \leq j \leq 2\right\}$.

$\# 3(\mathbf{c})$ : The Cayley graph of the semidirect product $C_{9} \rtimes C_{3}$ with the nodes labeled by the order of the corresponding elements.

\#4(a): Cayley graphs of two nonisomorphic semidirect products, with the nodes labeled by the order of the corresponding elements.

\#4(b): Subgroup lattices of two semidirect products of $C_{5}$ with $C_{4}$.

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\langle a, b\rangle
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\langle a, b\rangle
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$\langle 1\rangle$

