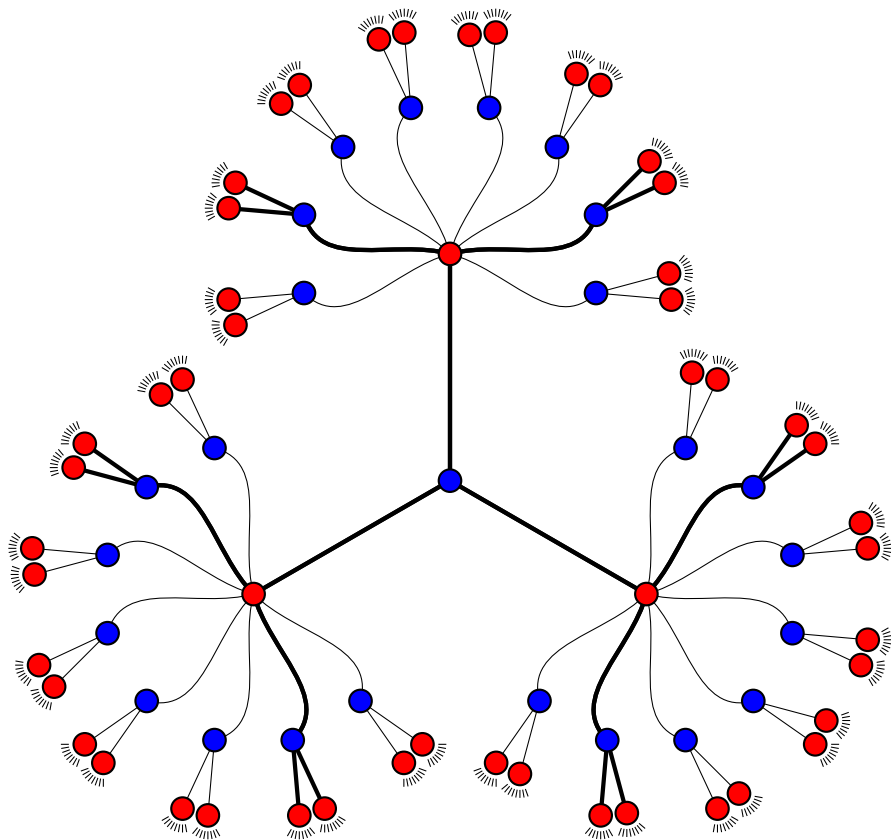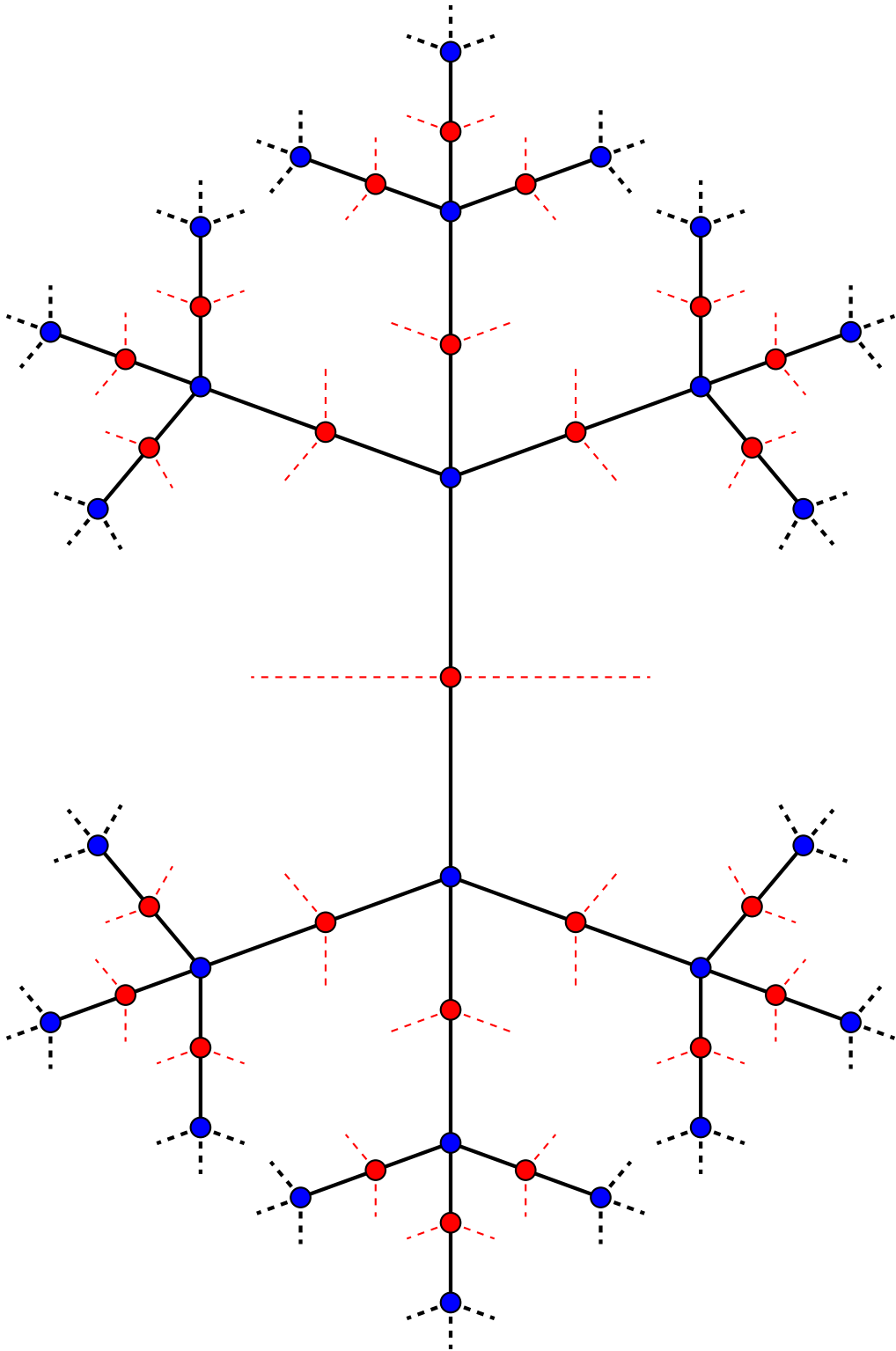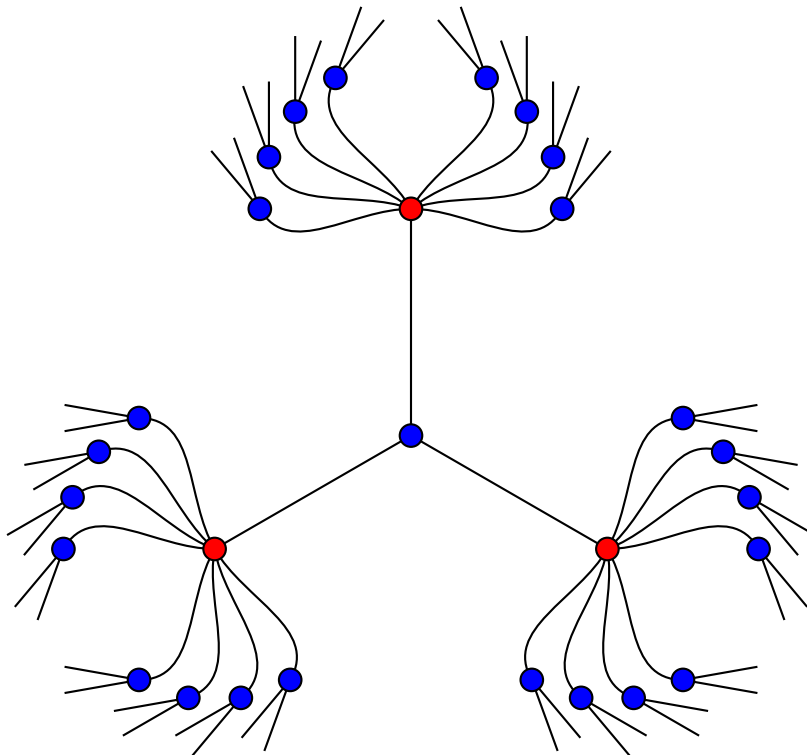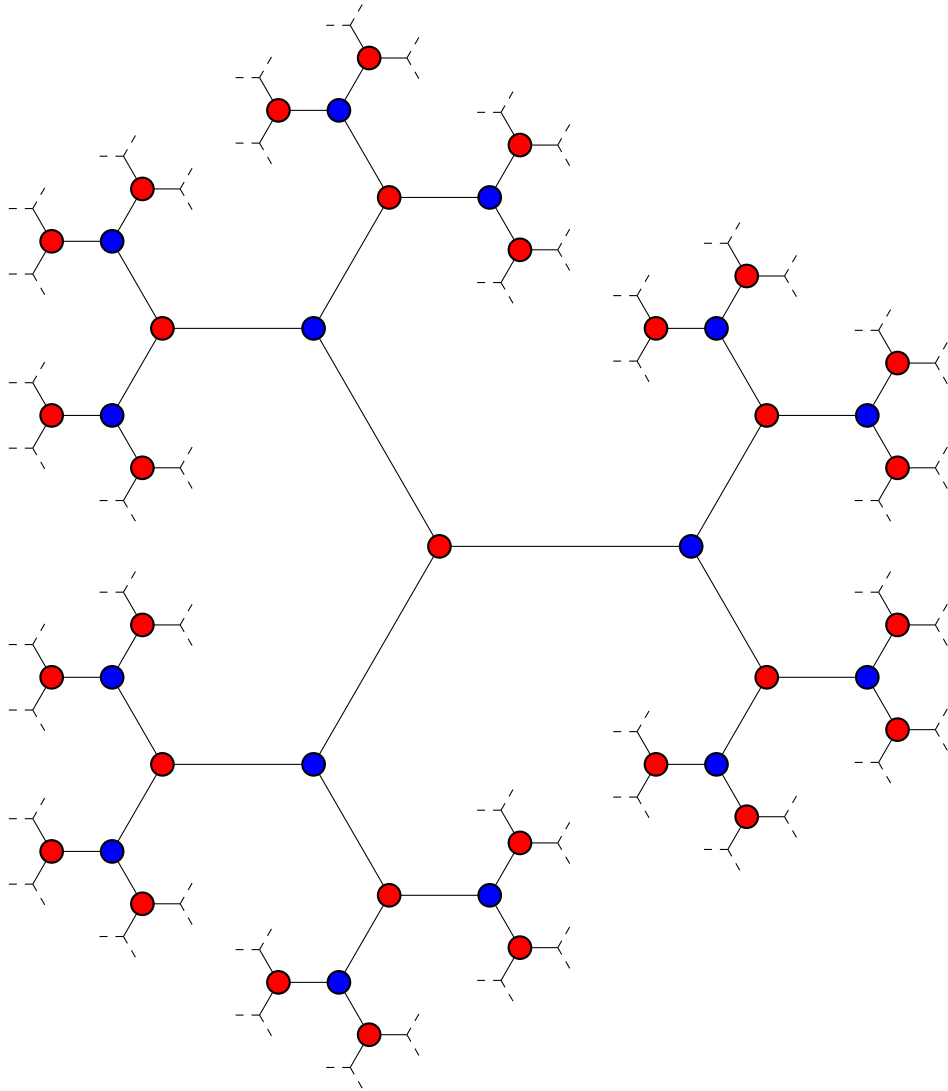# ILLUSTRATIONS

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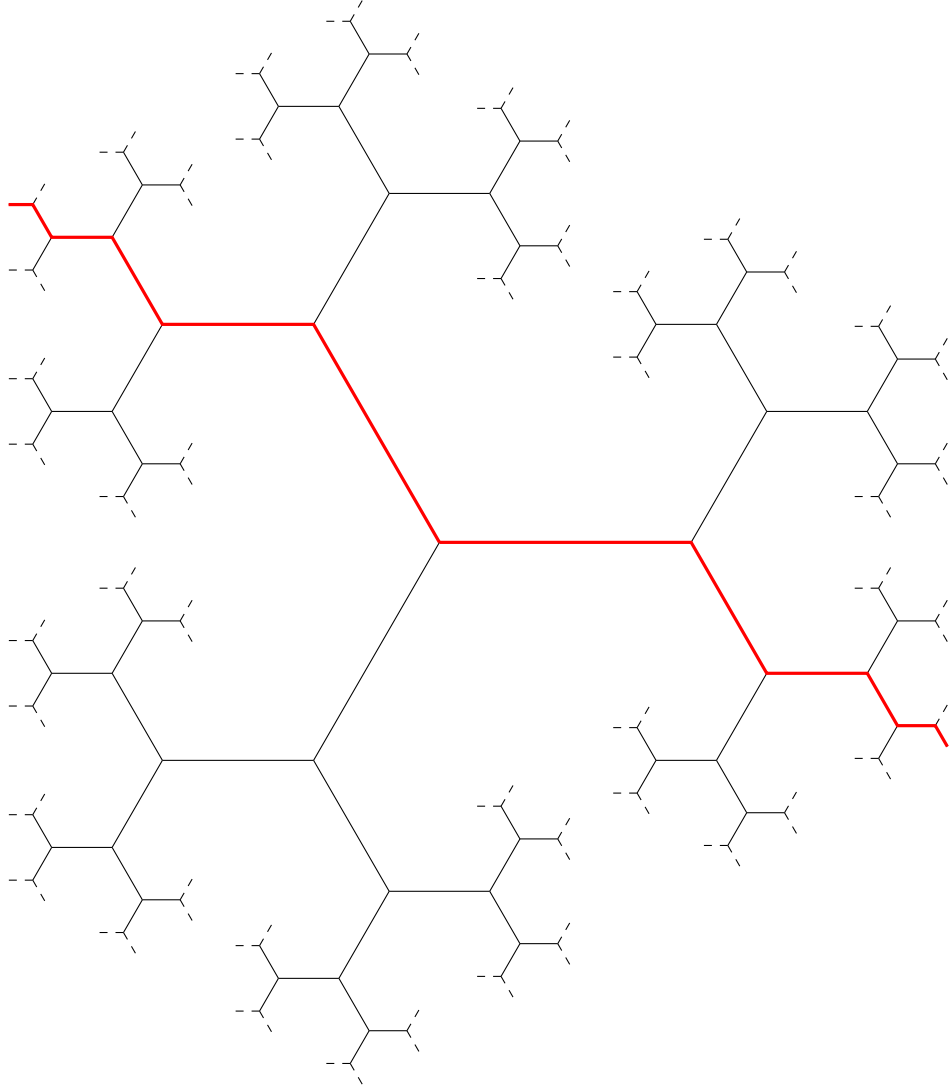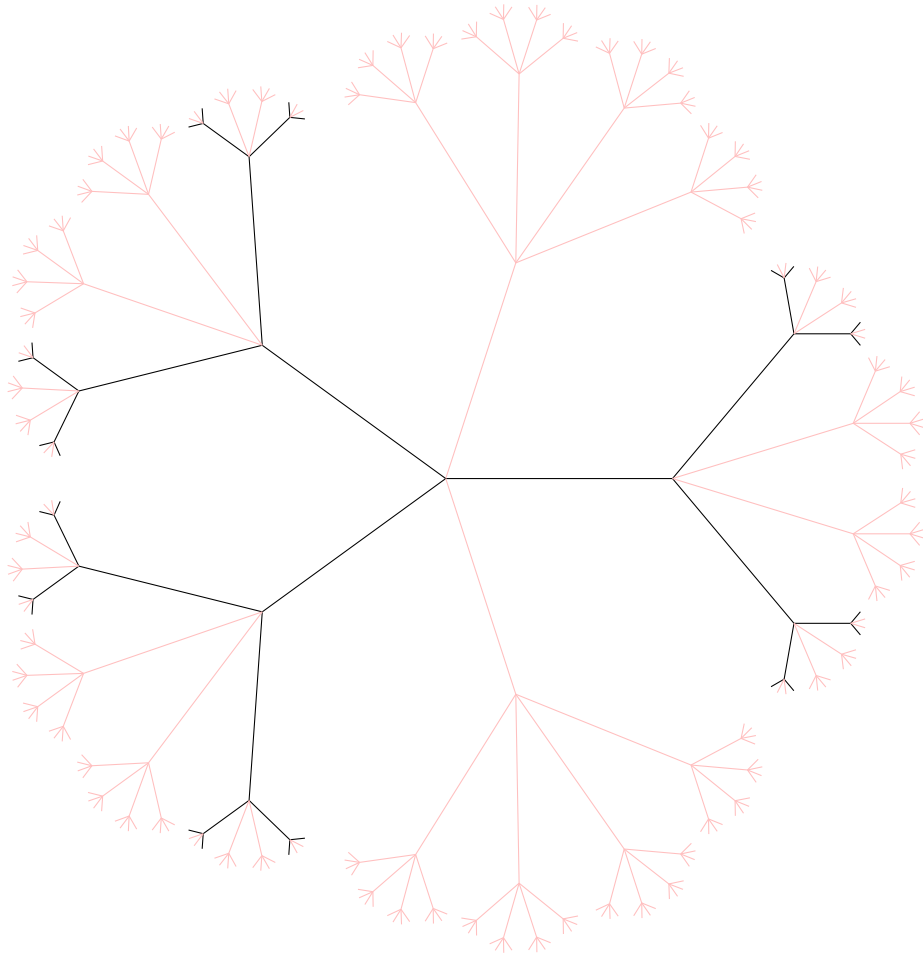
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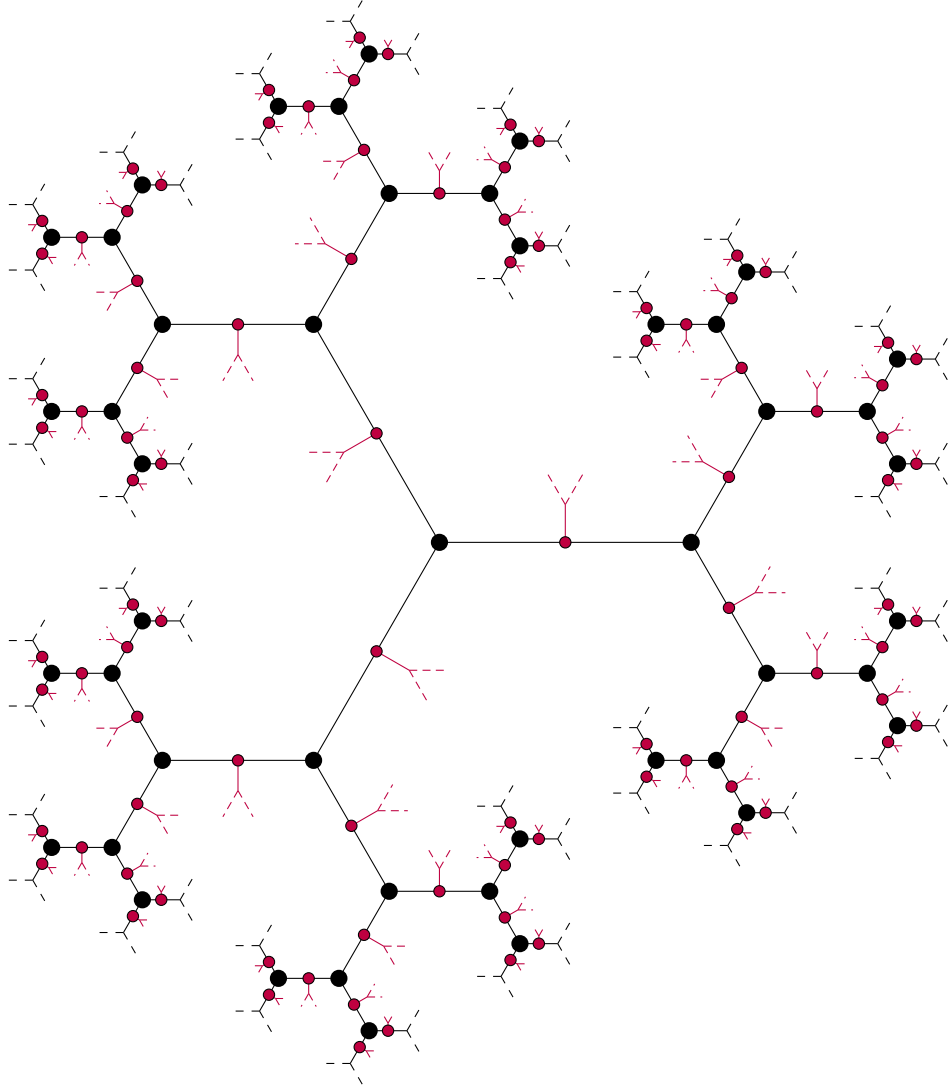
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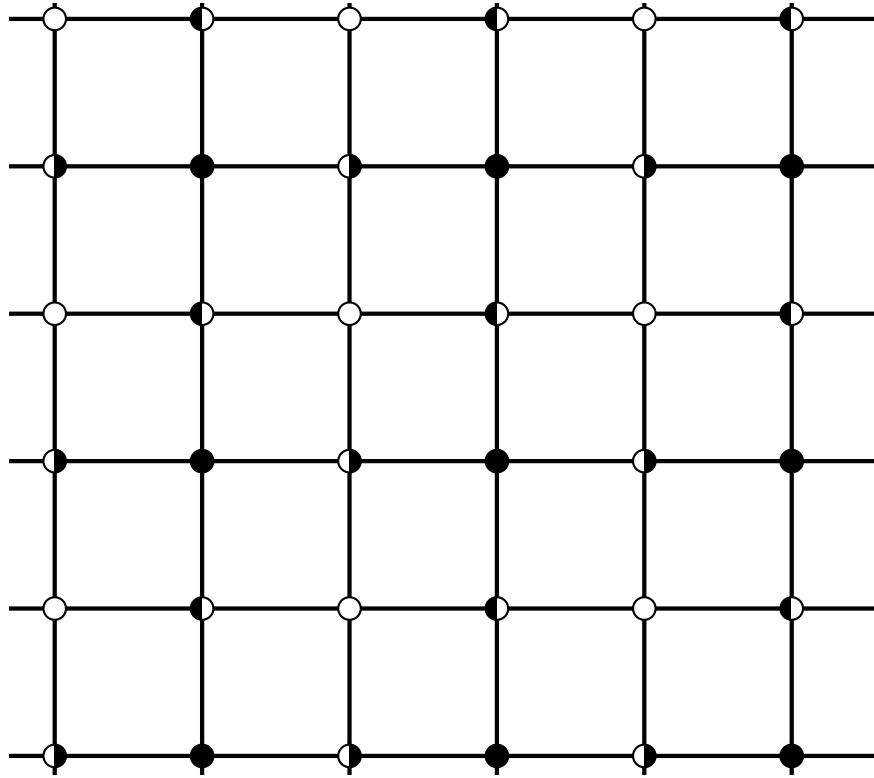
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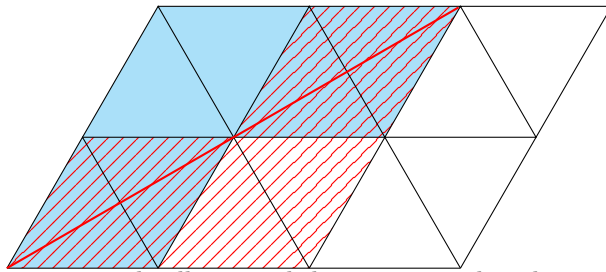
FIGURE 9. Two minimal galleries and the unique geodesic between points. We see that chambers traversed by the geodesic are in the minimal gallery.

Starting at the first chamber, we always make sure we go to a chamber where the normal vector of wall between chambers is in the closest to direction of the geodesic.

FIGURE 10. Three minimal galleries and the unique geodesic between points.

FIGURE 11. Construction of an apartment of X_{GL_2}.

FIGURE 12. Construction of an apartment of X_{GL_3}.

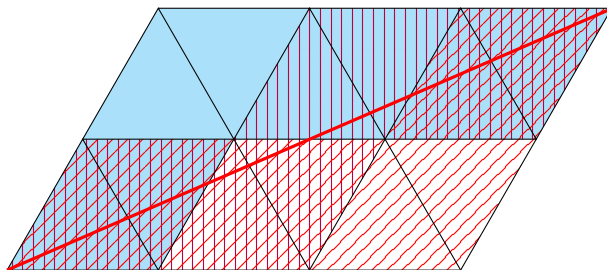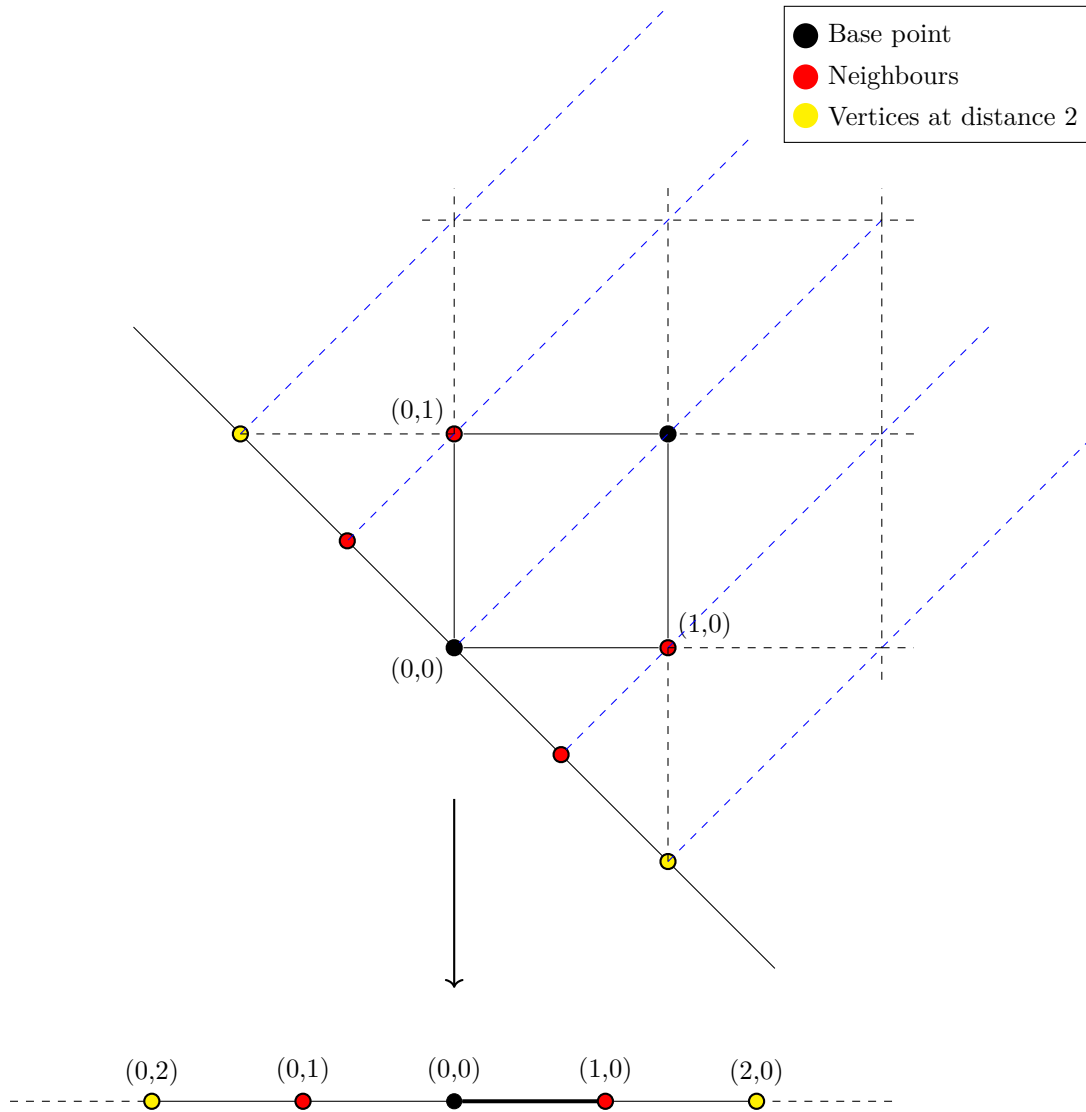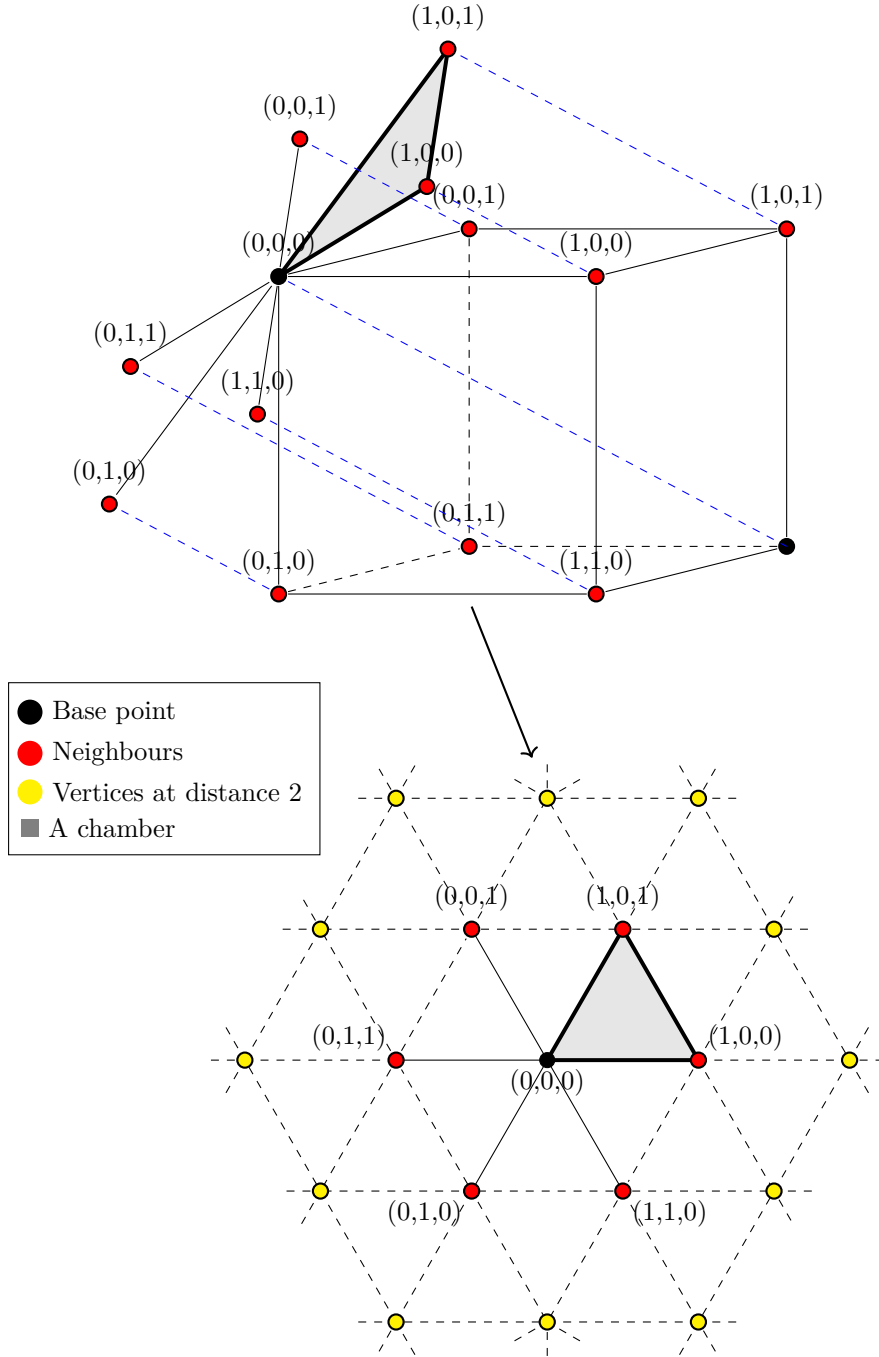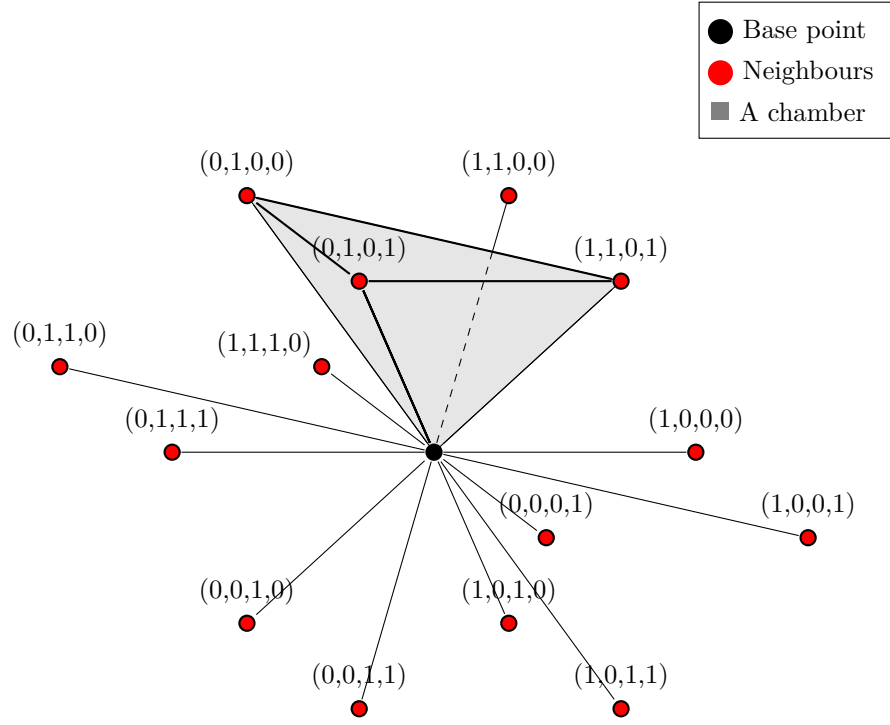FIGURE 13. Neighbours of a point within an apartment of X_{GL_4}.
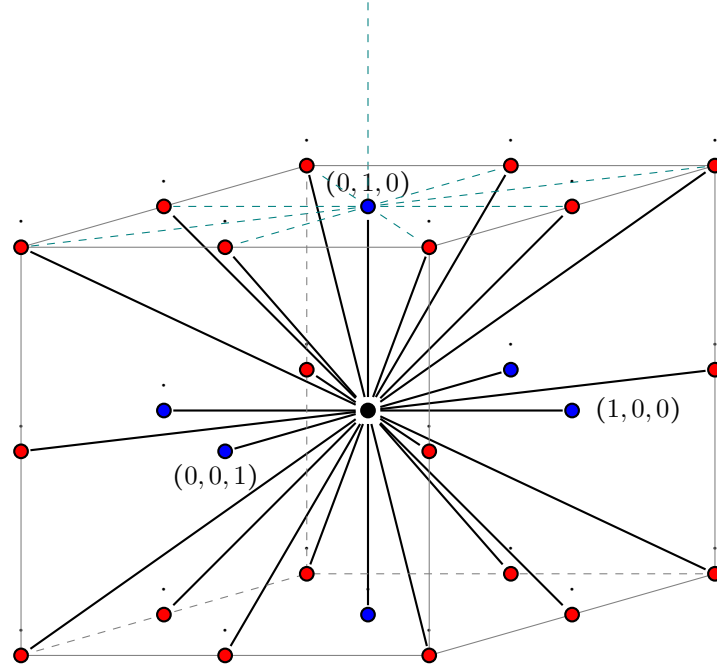
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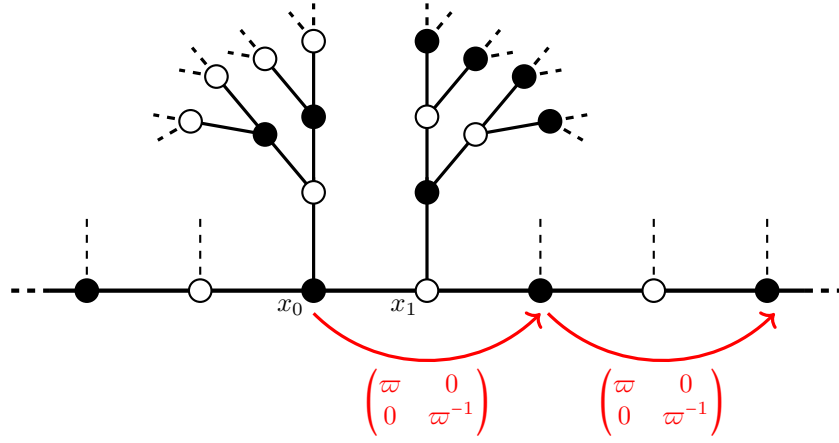
FIGURE 15. Action of SL_2 on the colored building
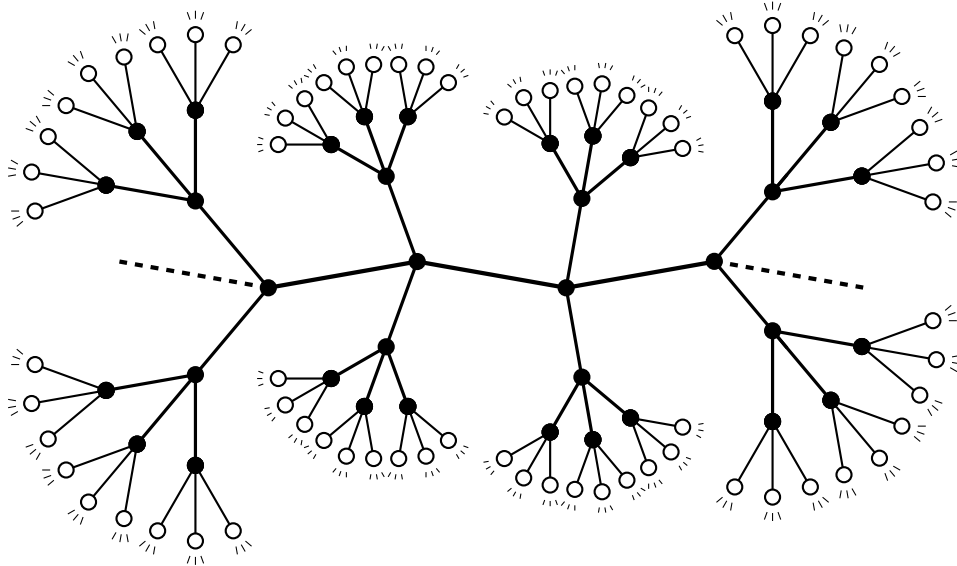
FIGURE 16. Tube of radius 2 around an apartment: vertices fixed by $\begin{pmatrix} a & 0 \\ 0 & b \end{pmatrix}$ with $\nu(1 - a/b) = 2$.
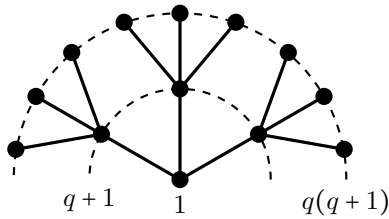
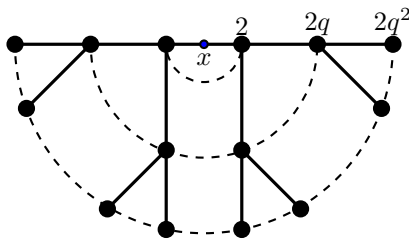FIGURE 17. Vertices in a ball of radius 2 centered at a vertex, with $q = 2$

FIGURE 18. Vertices in a ball of radius 2 centered at a midpoint, with $q = 2$
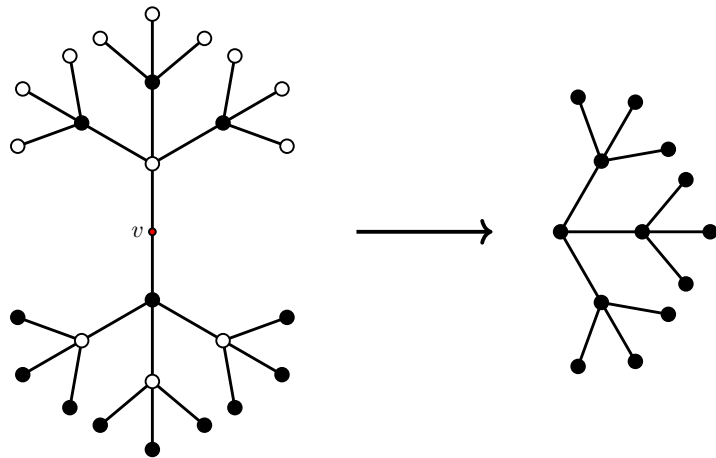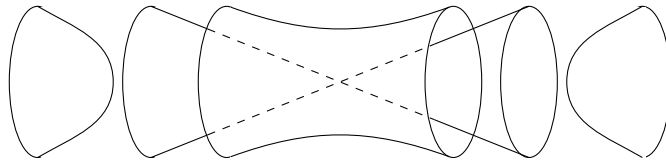
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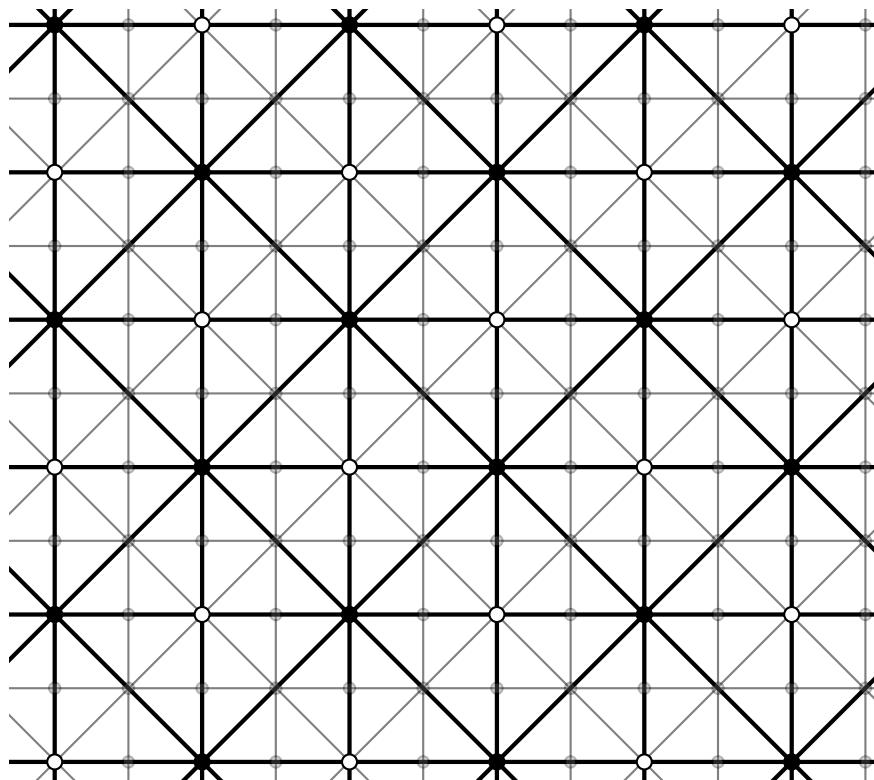
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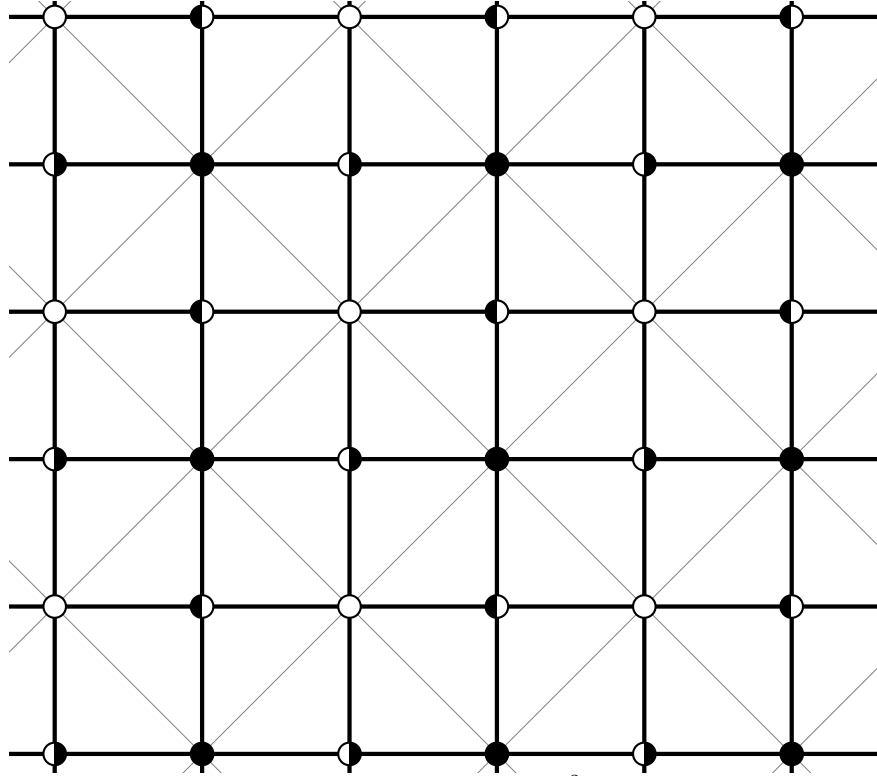
FIGURE 21. Apartment of the building of type A_2^2 inside the building of type C_2. The group $\mathrm{SL}_2 \times \mathrm{SL}_2$ preserves all 4 patterns, and GSp_4 preserves the 2 types of patterns (monochrome to monochrome, bichrome to bichrome)

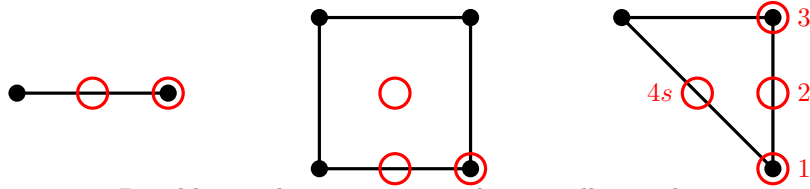FIGURE 22. Possible parahorics corresponding to elliptic elements in GL_2, $\mathrm{GL}_2 \times \mathrm{GL}_2$ and GSp_4 from left to right.

$$\alpha + 2\beta = t_2^2/\lambda$$

$$\beta = t_1^{-1}t_2$$
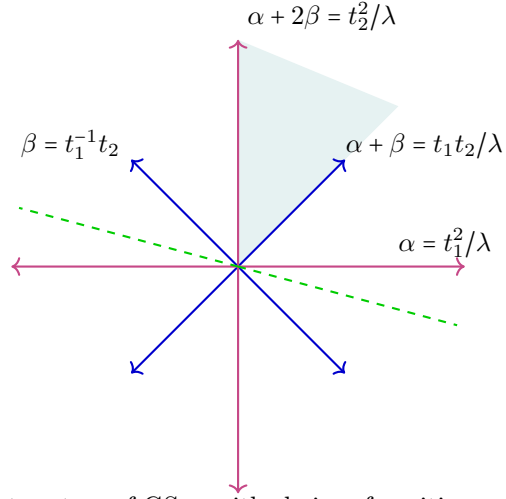
$$\alpha + \beta = t_1 t_2/\lambda$$

$$\alpha = t_1^2/\lambda$$

FIGURE 23. Root system of GSp_4 with choice of positive roots, the long roots is the root system of H. Shaded is the positive Weyl Chamber of G.

$$\beta = t_2 t_3^{-1}$$

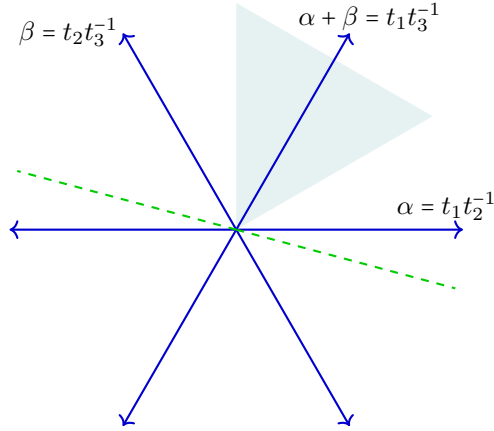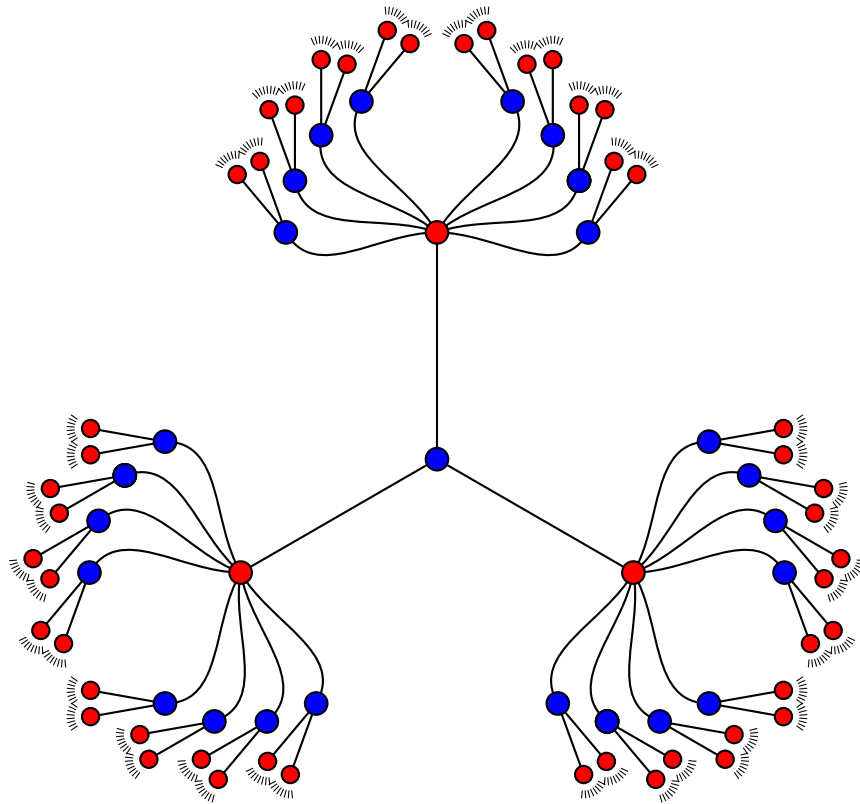$$\alpha + \beta = t_1 t_3^{-1}$$

$$\alpha = t_1 t_2^{-1}$$

FIGURE 24. Root system of type A_2
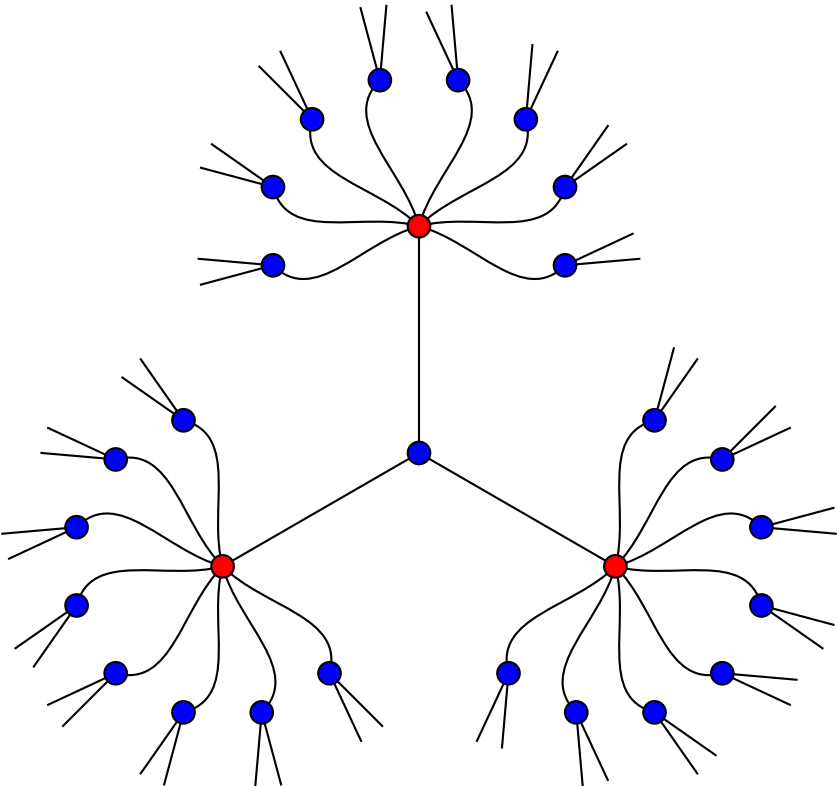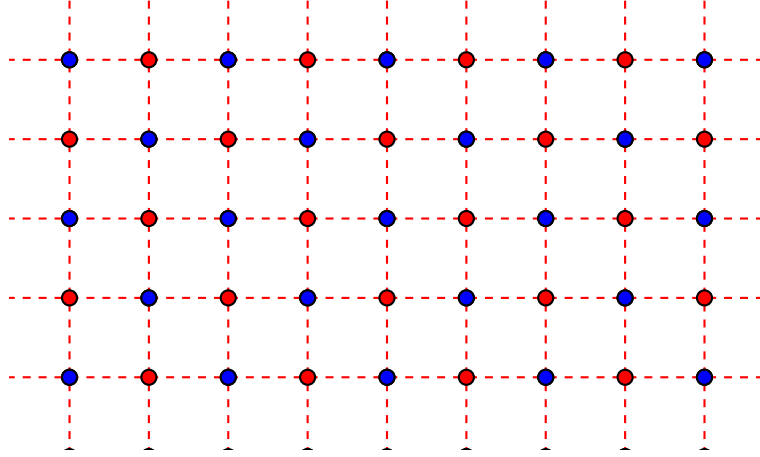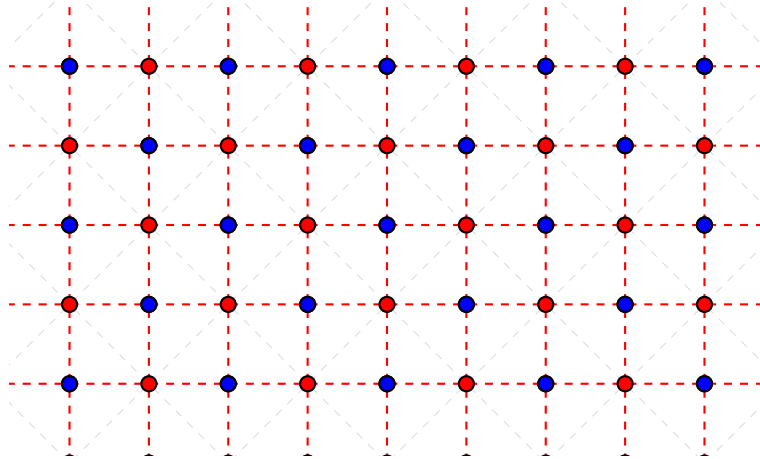
FIGURE 25. Building of unramified $U(3)$ v.2
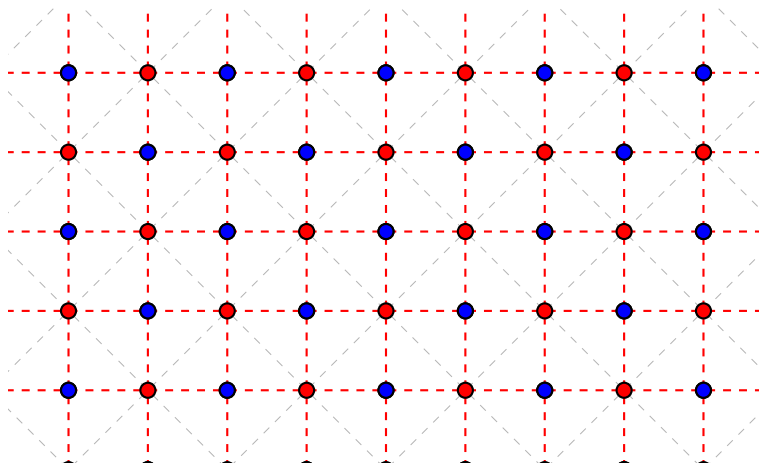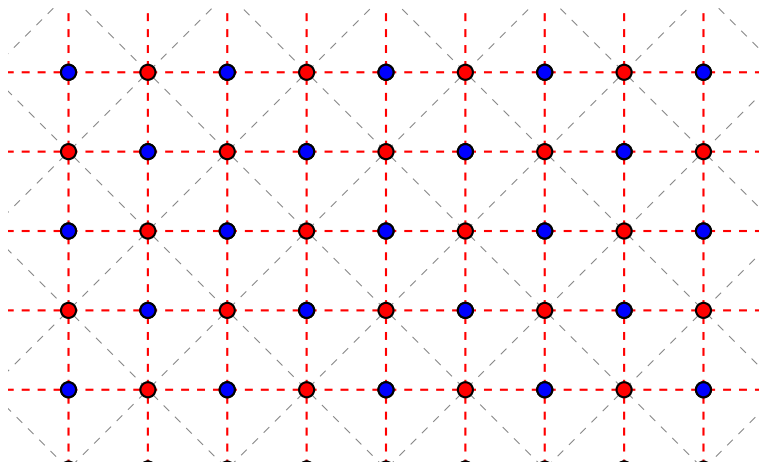
FIGURE 26. building of unramified $U(3)$ v.3

Apartment in the building of type A_2^2 (SL_2^2):

Apartment in the building of type $\mathbb{A}_2$ (SL_2^2):

Apartment in the building of type $\mathcal{C}_2$ (Sp_4^2):

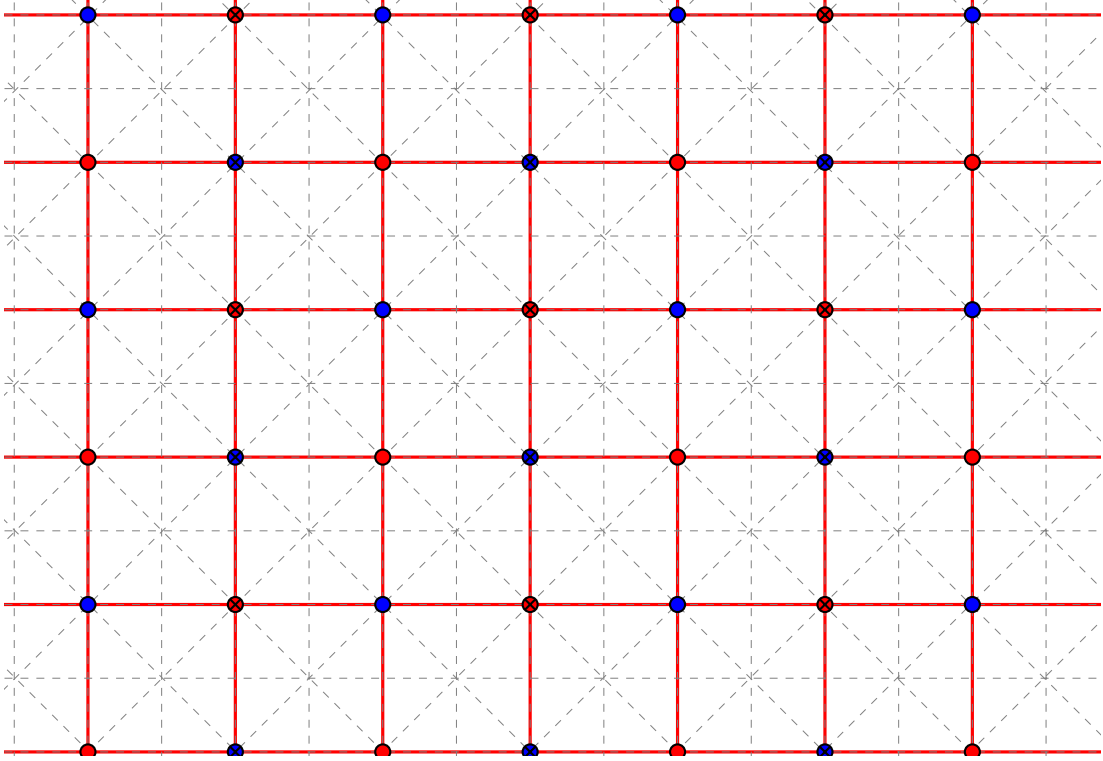Apartment in the building of type C_2 (Sp_4):

FIGURE 27. Apartment of the building of type A_2^2 inside the building of type C_2.

GL_2^2 acts transitively on vertices, $(\mathrm{GL}_2^2)^0$ preserves colors, and SL_2^2 preserves colors and patterns.