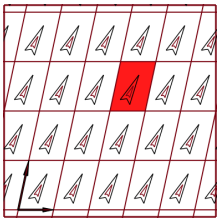
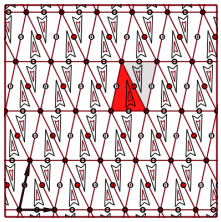
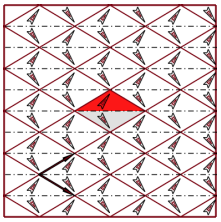
Les dix-sept pavages du plan



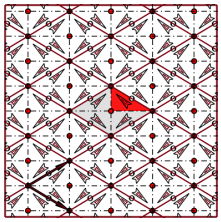
(P1)



(P2)



(P6)



(P9)

Petite légende

❖ en rouge, un domaine fondamental du groupe paveur (le carreau du pavage, que l'on peut tourner et retourner pour paver)

❖ en gris, un domaine fondamental du groupe des translations du paveur

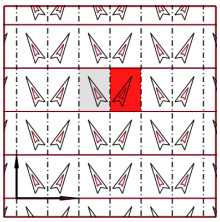
❖ les deux grosses flèches noires représentent une base du groupe des translations du paveur

❖ la flèche noir et rouge sert à orienter le domaine fondamental (qui n'a pas de symétrie)

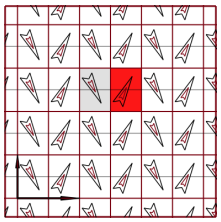
❖ les petits ronds sont les centres des rotations du paveur (un même symbole pour les centres d'une même orbite, un symbole par orbite)

❖ les axes des symétries (orthogonales) sont dessinés en trait-point $(- \cdot -)$

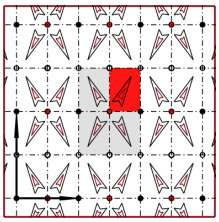
❖ les traits gris sont les axes des symétries glissées dont la classe de conjugaison doit apparaître dans un système de générateurs du paveur (pavages P8, P11 et P12)



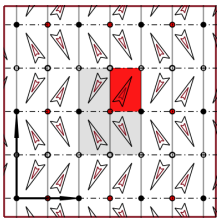
(P7)



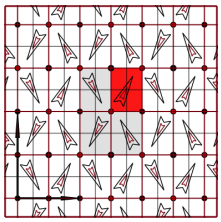
(P8)



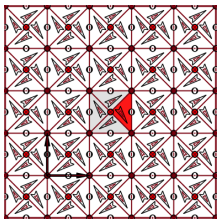
(P10)



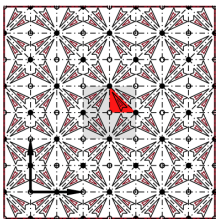
(P11)



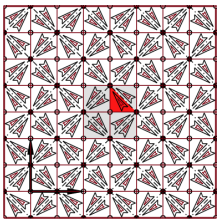
(P12)



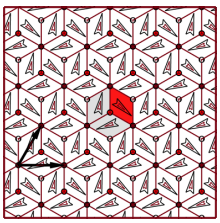
(P4)



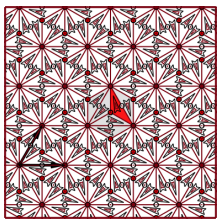
(P15)



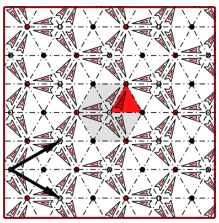
(P16)



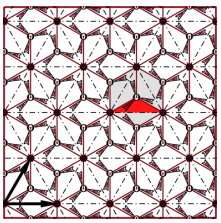
(P3)



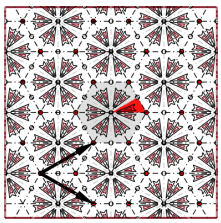
(P5)



(P13)



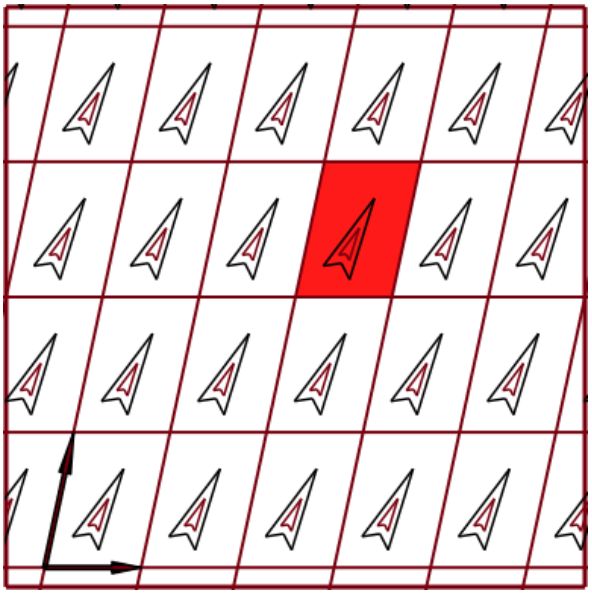
(P14)



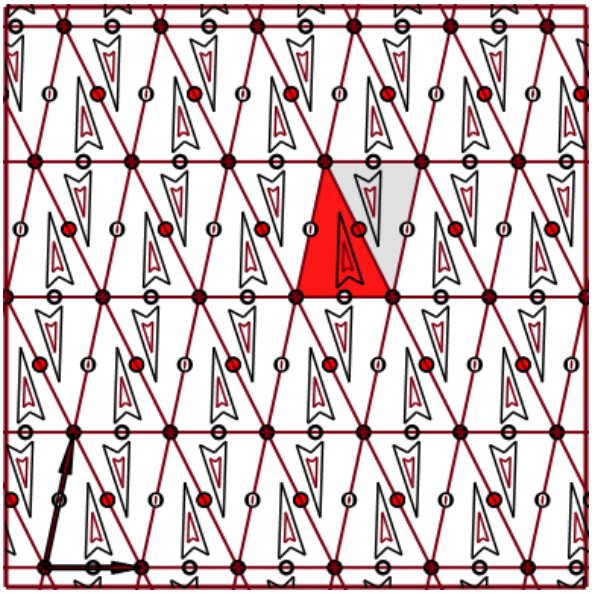
(P17)

1 Réseau quelconque

Les deux paveurs P1 et P2 sont positifs.



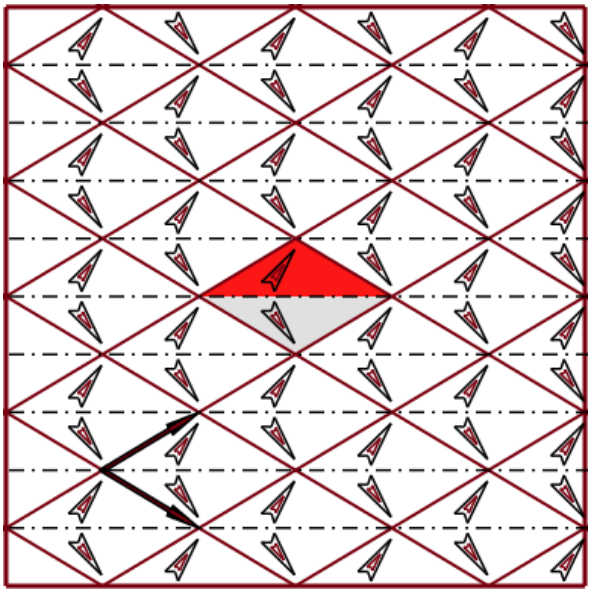
(P1)



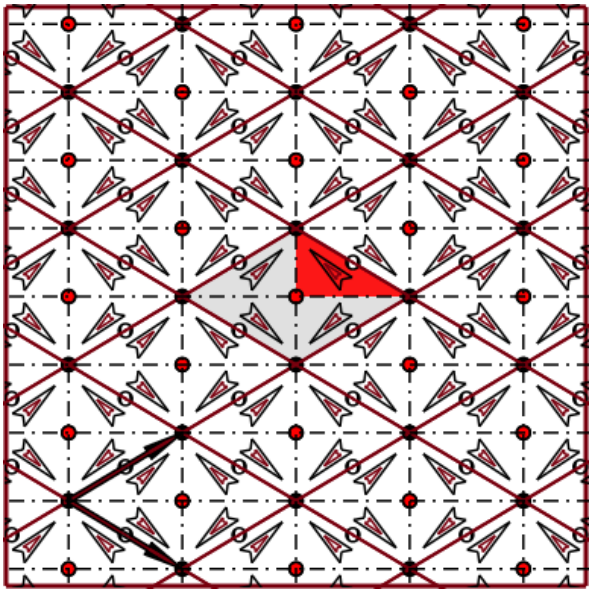
(P2)

2 Réseau losangulaire

Ni P6 ni P9 ne sont positifs.



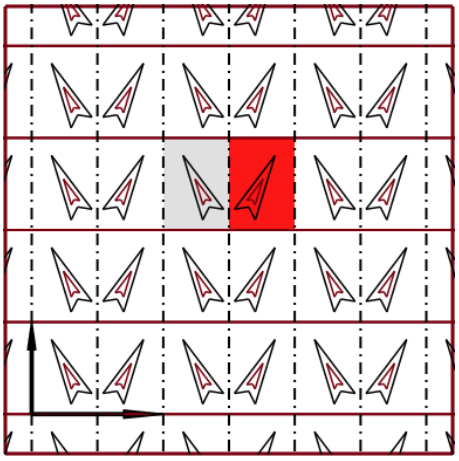
(P6)



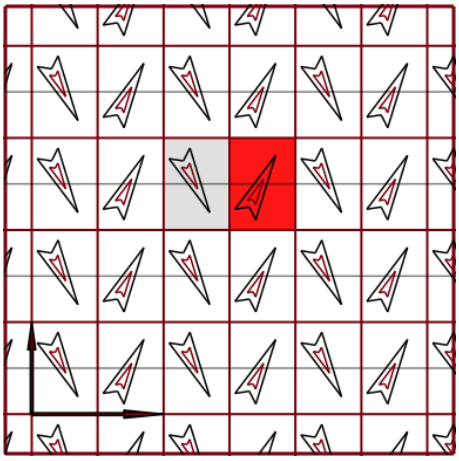
(P9)

3 Réseau rectangulaire

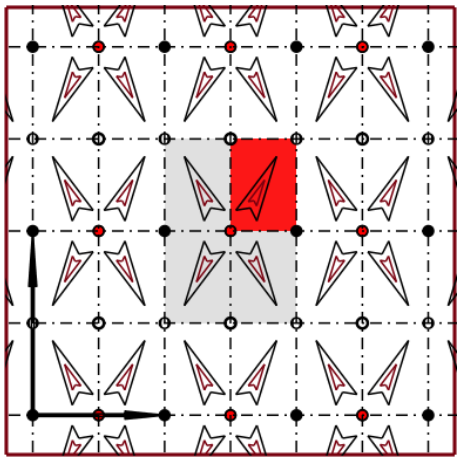
Aucun des cinq paveurs rectangulaires n'est positif.



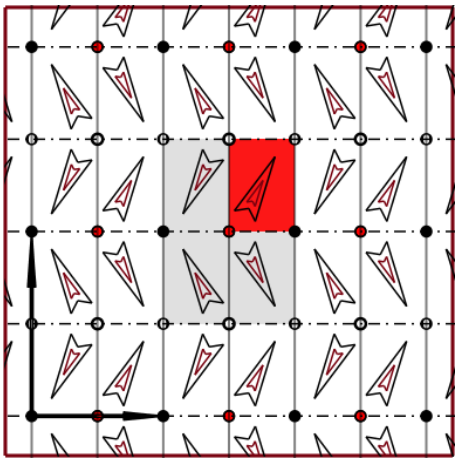
(P7)



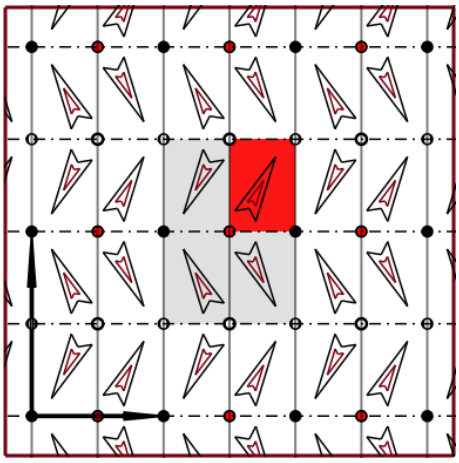
(P8)



(P10)



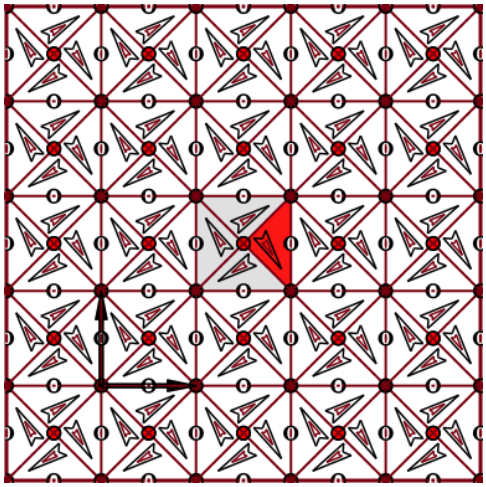
(P11)



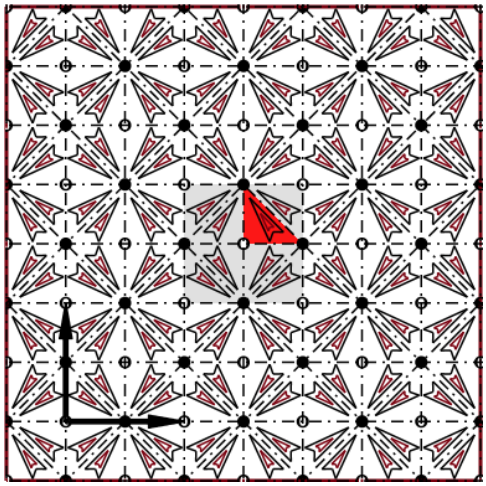
(P11)

4 Réseau carré

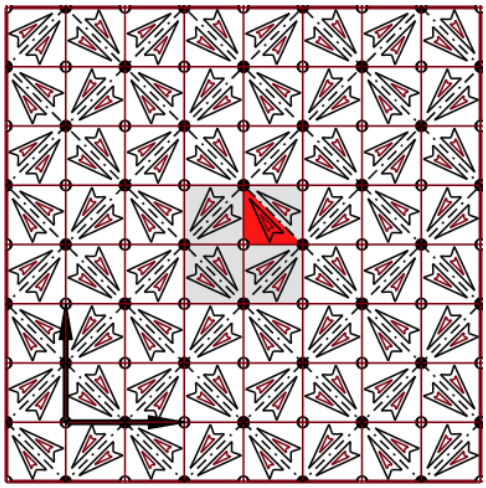
Le paveur P4 est positif, P15 et P16 ne le sont pas.



(P4)



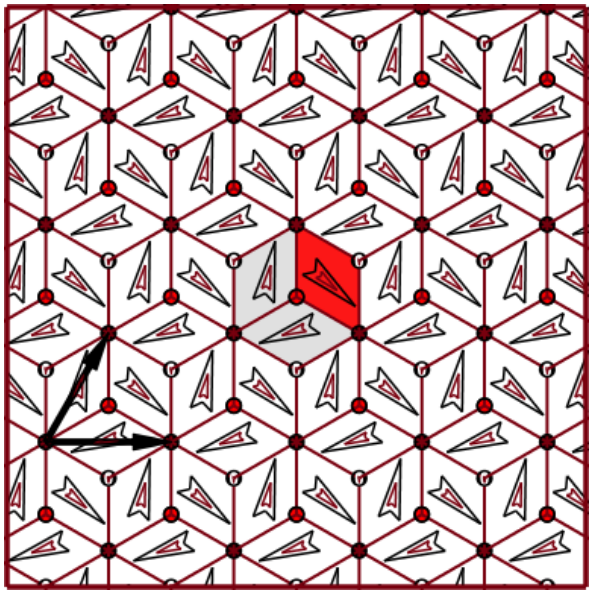
(P15)



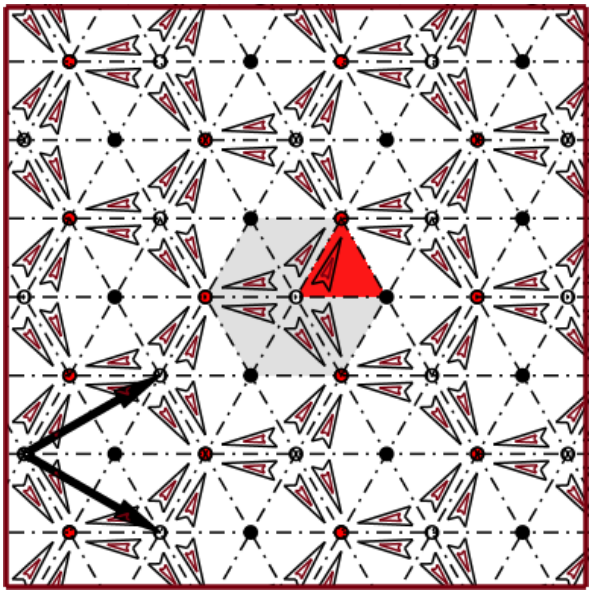
(P16)

5 Réseau hexagonal

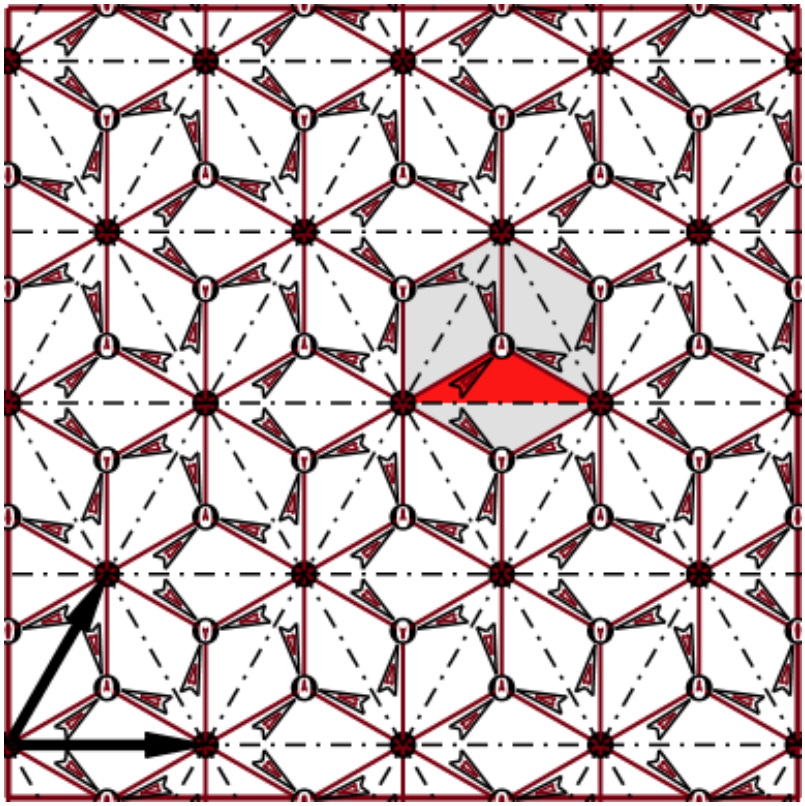
Les paveurs P3 et P5 sont positifs, P13, P14 et P17 ne le sont pas.



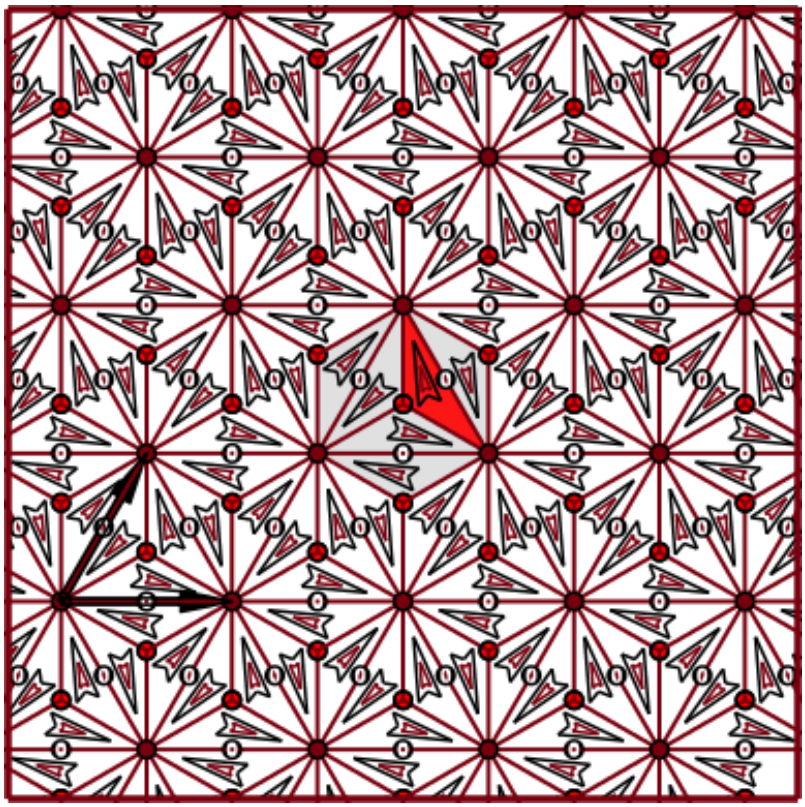
(P3)



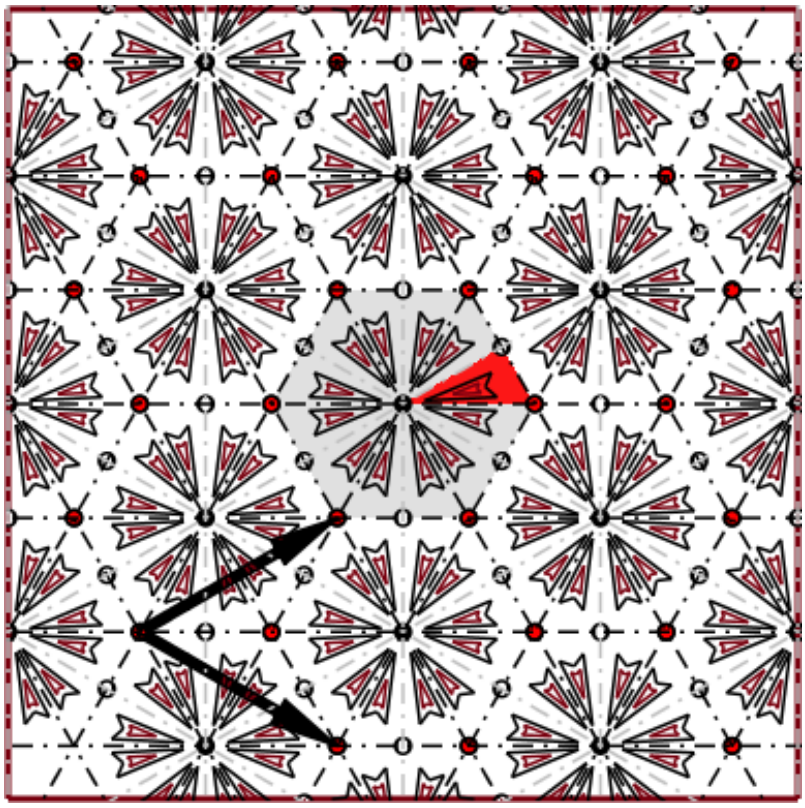
(P13)



(P14)



(P5)



(P17)