

Mathématiques discrètes

Solutions TP 10

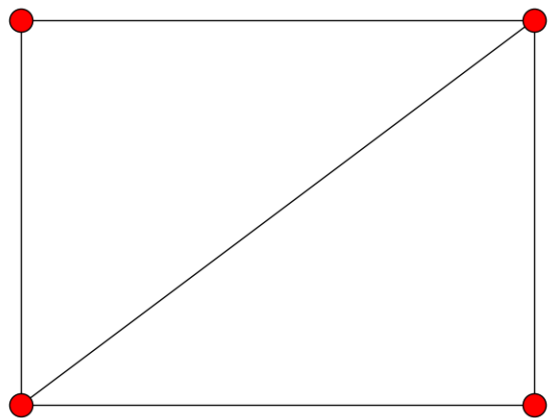
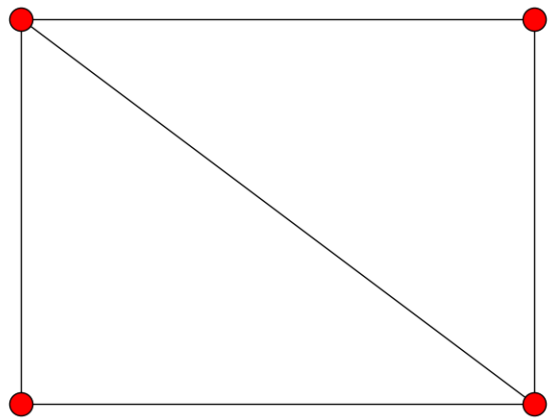
Laurent Mehdi

Exercice 1

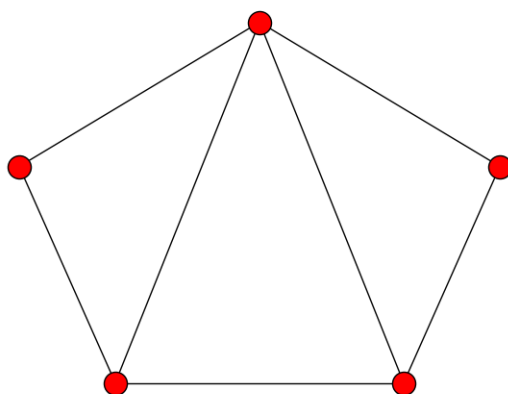
Voir solutions TP 8 et TP 9.

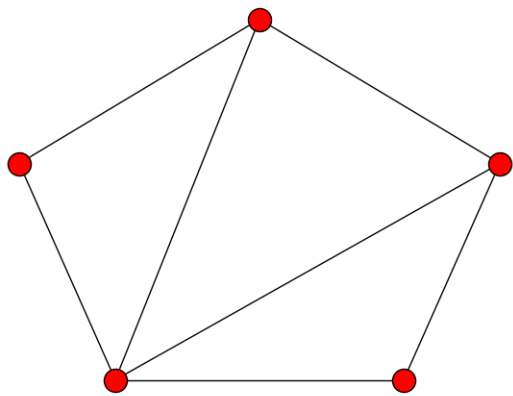
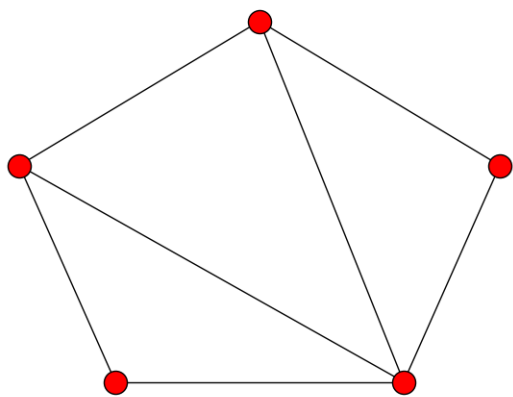
Exercice 2.1

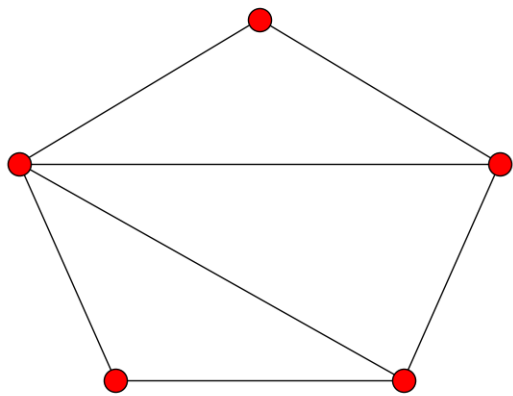
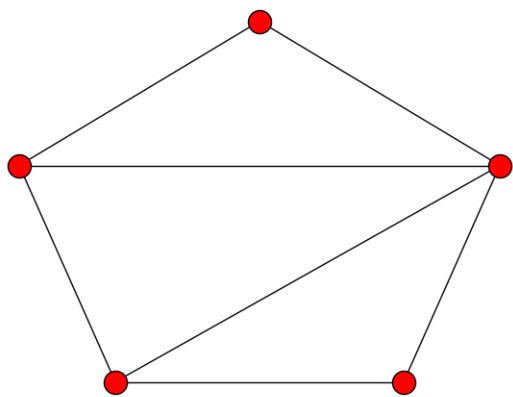
Toutes les triangularisations possibles pour un carré. (Oui, on dirait des rectangles mais c'est des carrés)



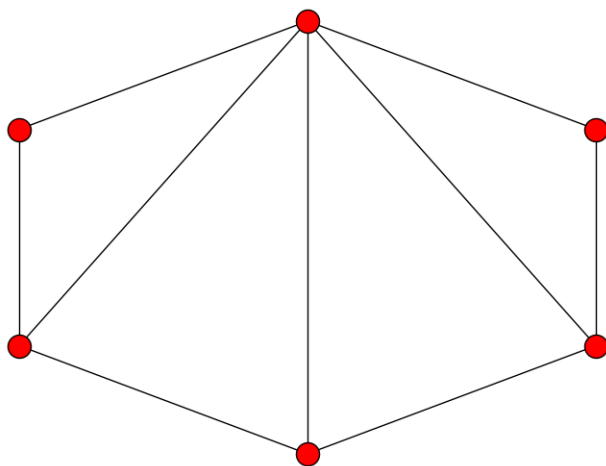
Toutes les triangularisations possibles pour un pentagone.

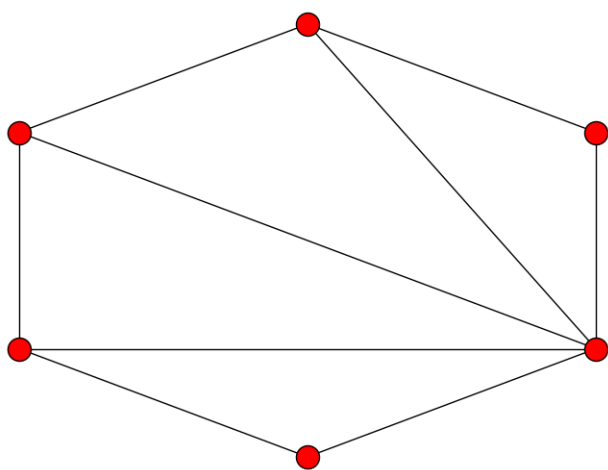
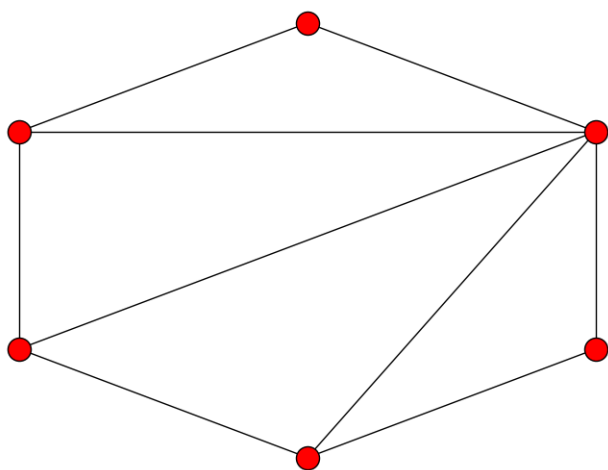


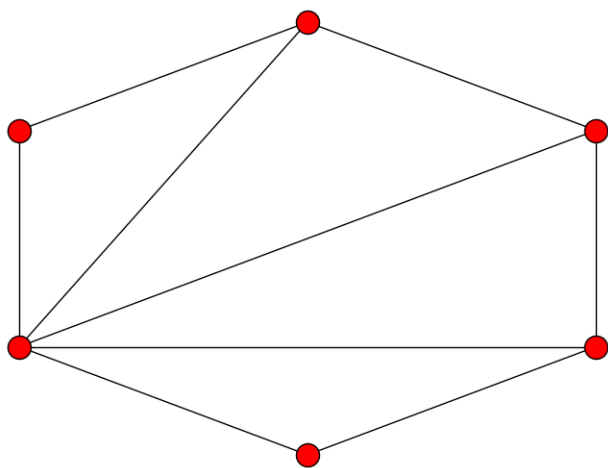
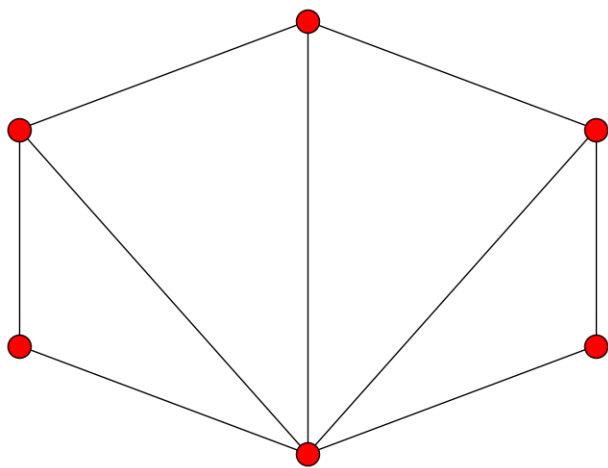


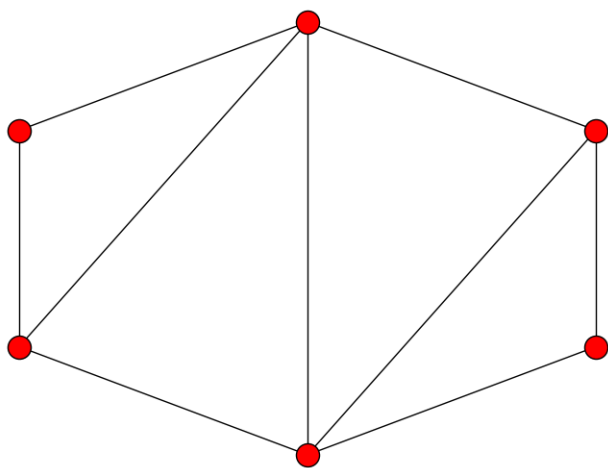
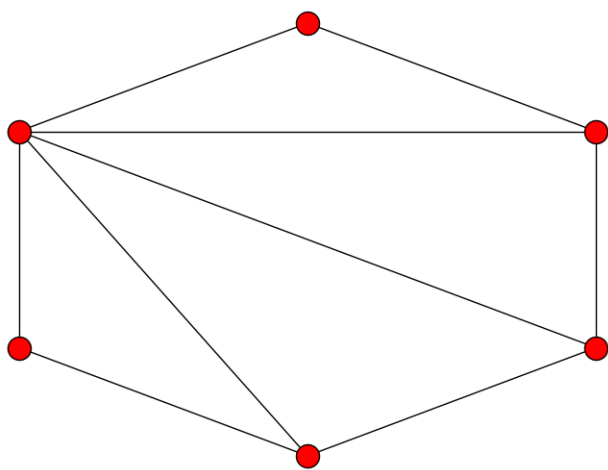


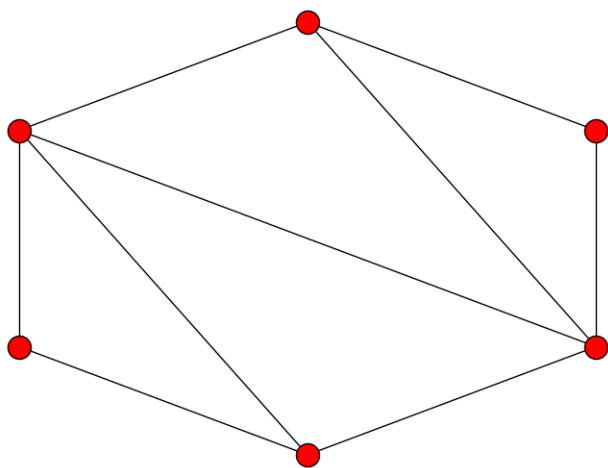
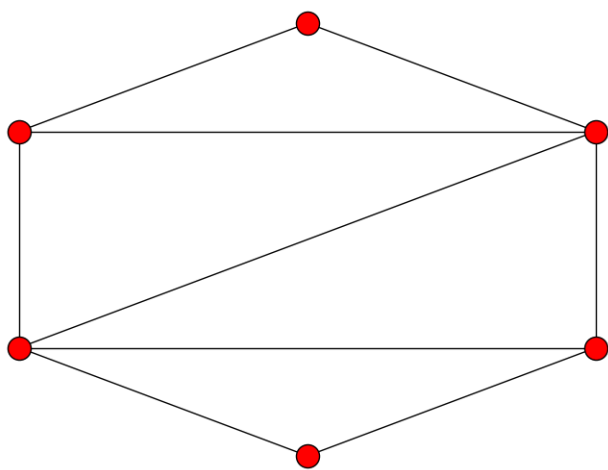
Toutes les triangularisations possibles pour un hexagone.

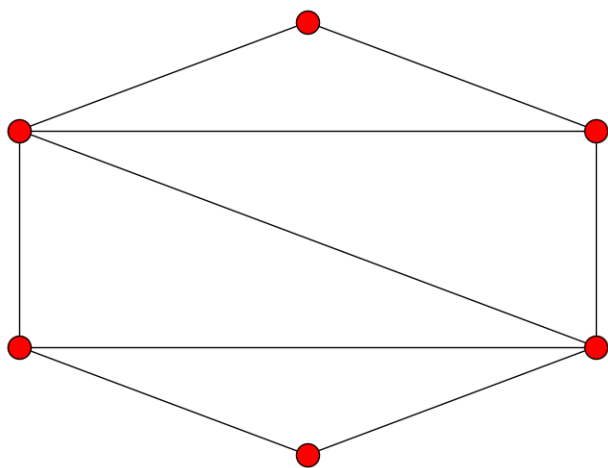
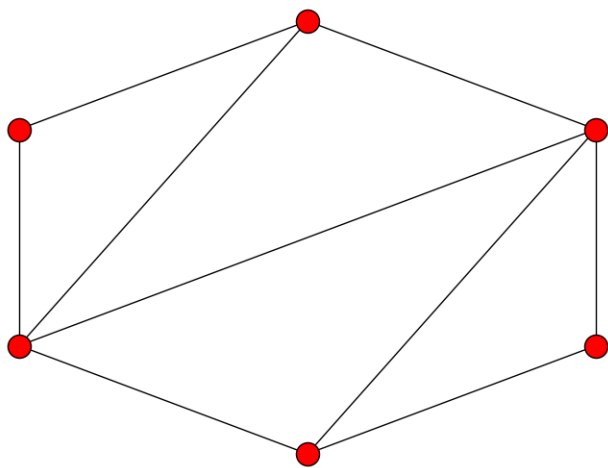


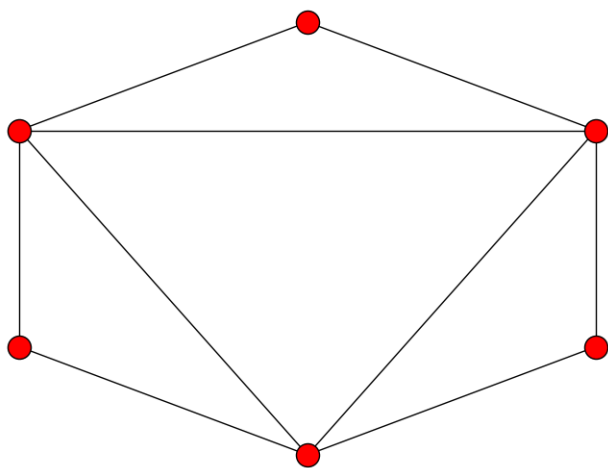
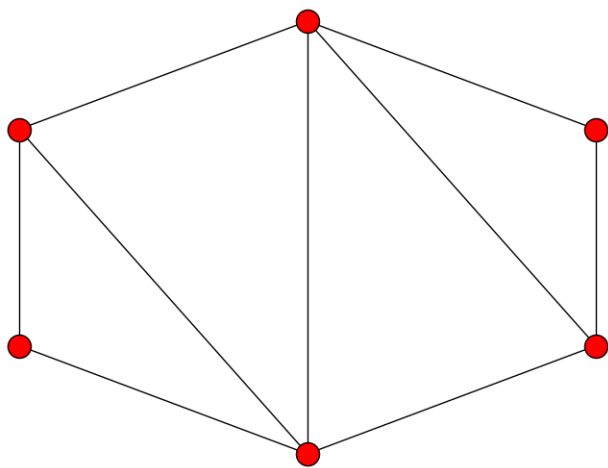


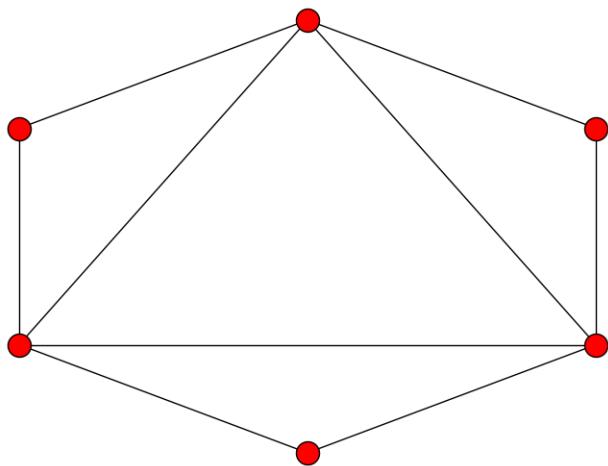












Exercice 2.2

réurrence, car la première triangularisation réduit le polygone pour T_n : nombre de façons de triangulariser un n-gone

$$T_n = \sum_{i=0}^{n-2} T_{1+i} T_{n-1-i}$$

Exercice 3

Pour toute montée, on ouvre une parenthèse.
Pour tout plat, on ferme une parenthèse.