

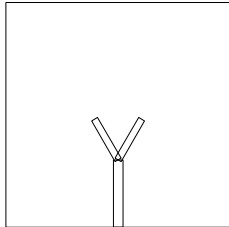
E5.5 / S2 : FRACTALES NATURELLES

M5
F-32

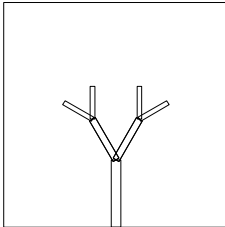
MODULE 5
ARCHITECTURES NATURELLES : PROPORTIONS / TRACES REGULATEURS

☐ UN ARBUSTRE

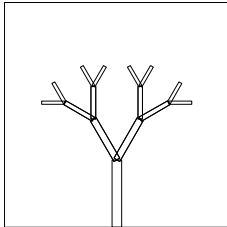
- ▶ Préfractale : un tronc + 2 branches (tronc à 70% avec rotation + ou -30°).
- ▶ Protocole : homothétie 70% + rotation +/-30°.
- ▶ Itérations : 6.



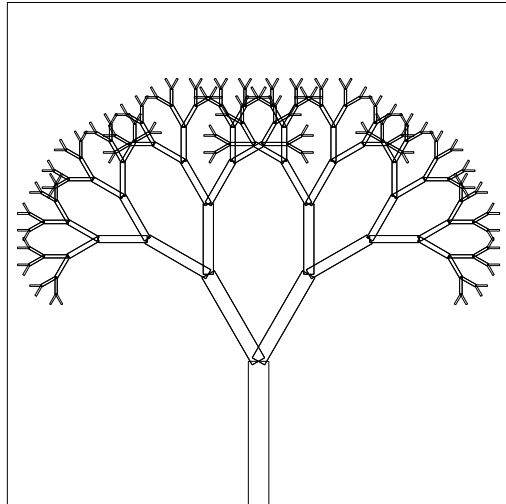
▶ Structure initiale



▶ Itération n° 1

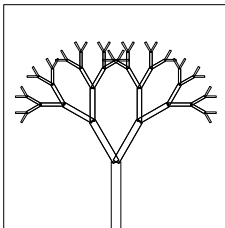
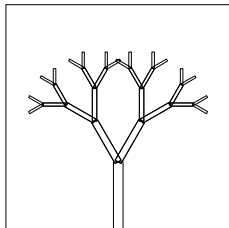


▶ Itération n° 2

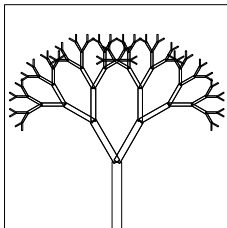


▶ Itération n° 6

▶ Itération n° 3



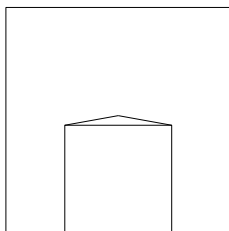
▶ Itération n° 4



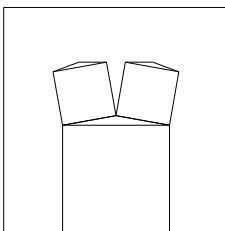
▶ Itération n° 5

☐ UN CHOU

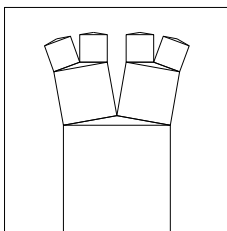
- ▶ Préfractale : un carré surmonté d'un triangle isocèle (10°/160°/10°).
- ▶ Protocole : homothétie + rotation -> empilement.
- ▶ Itérations : 6.



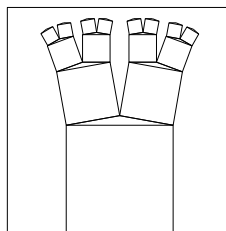
▶ Structure initiale



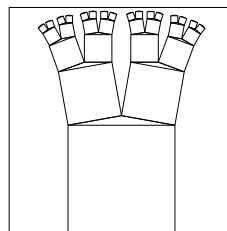
▶ Itération n° 1



▶ Itération n° 2



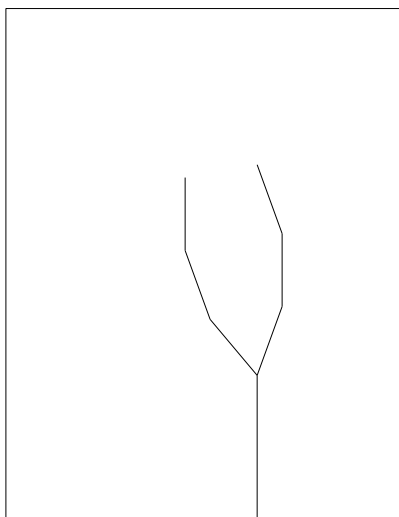
▶ Itération n° 2



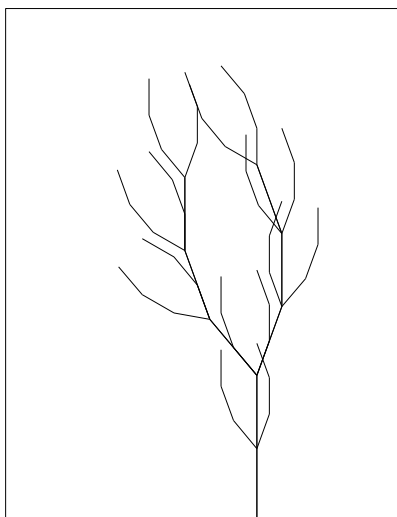
▶ Itération n° 2

☐ UN ARBRE

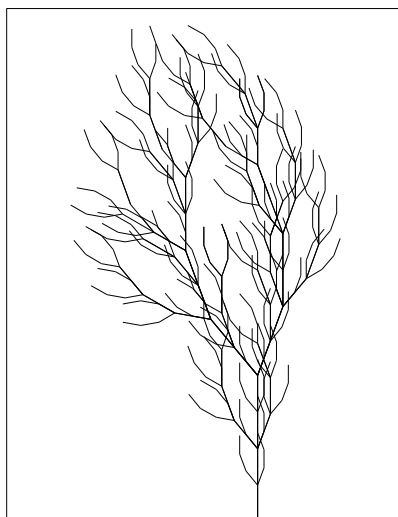
- ▶ Préfractale : un tronc à 2 branches (50°-70°).
- ▶ Protocole : homothétie + rotation.
- ▶ Itérations : 2.



▶ Structure initiale



▶ Itération n° 1



▶ Itération n° 2

ETUDE DES FORMES

