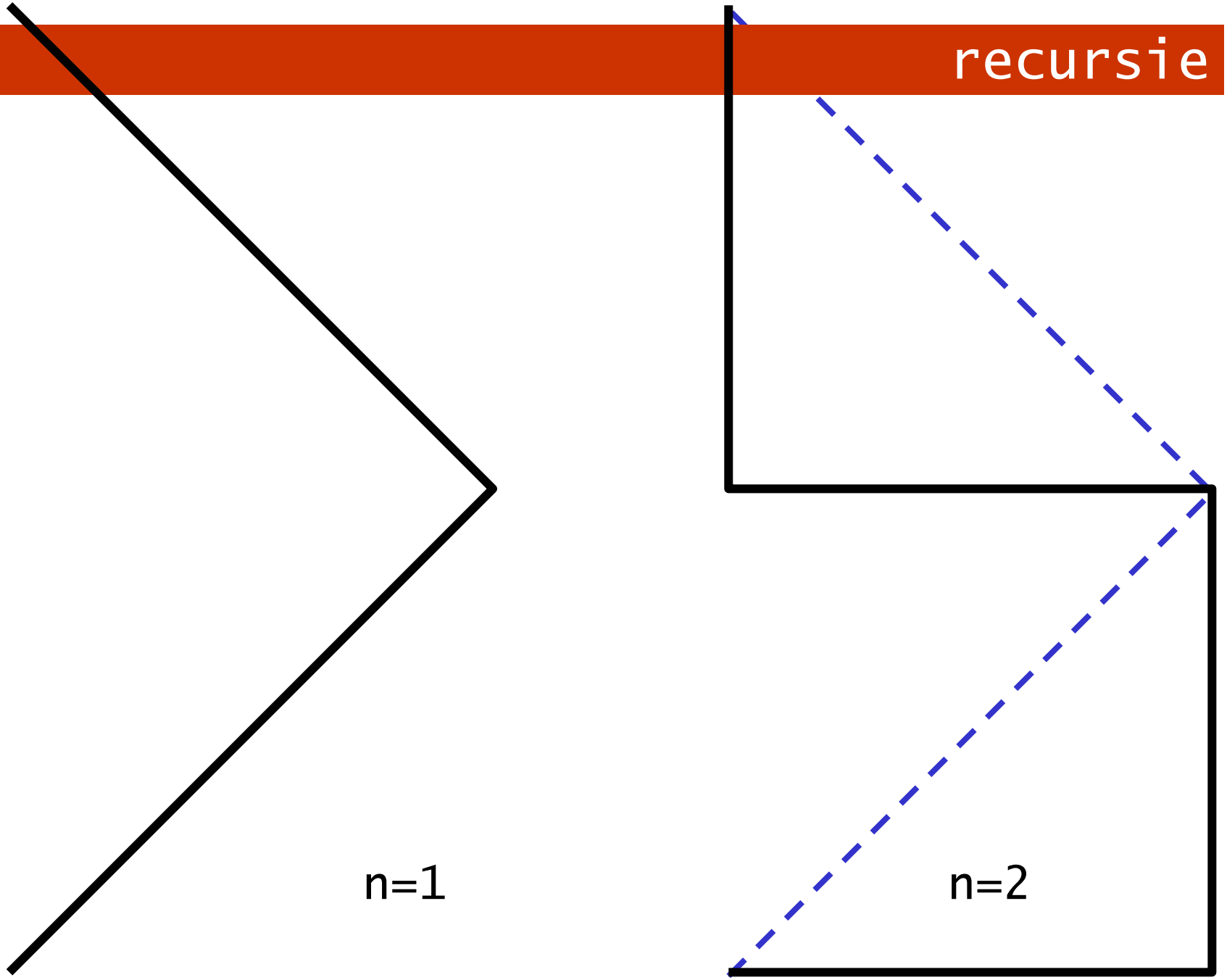
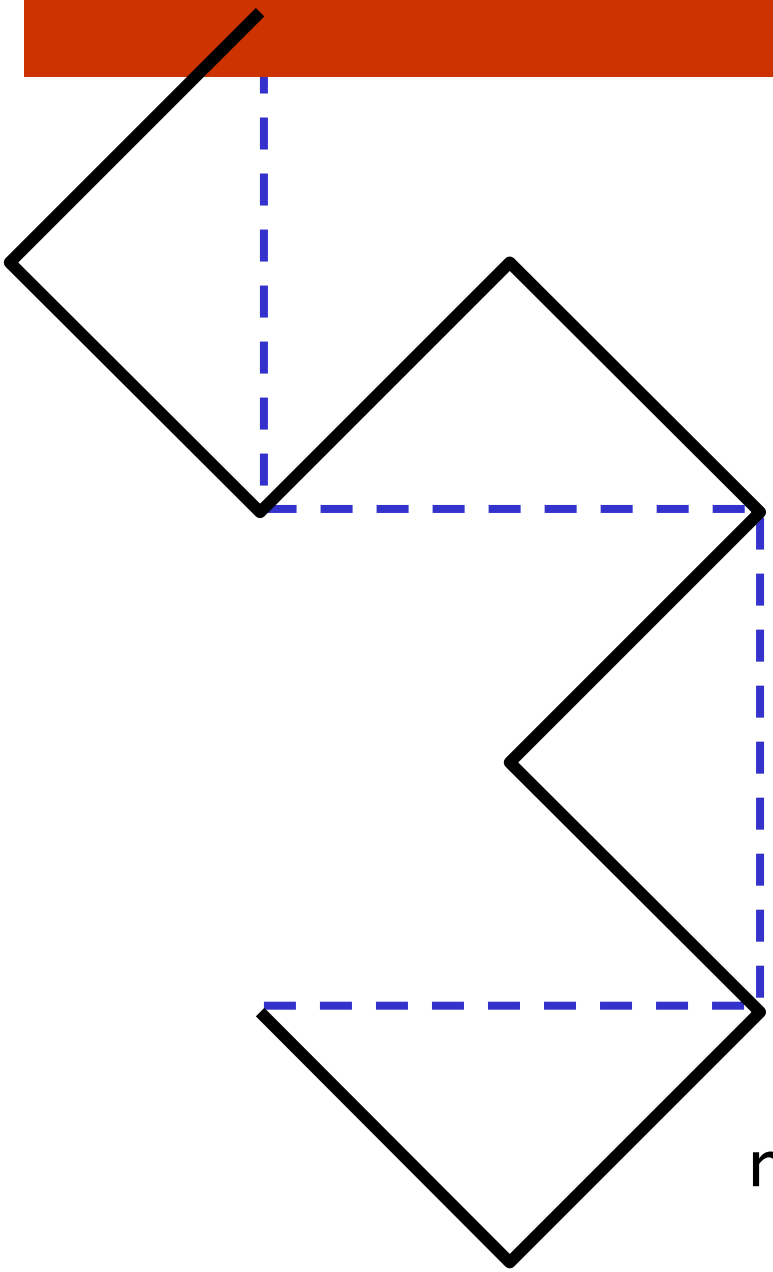
$2^{12}=4096$

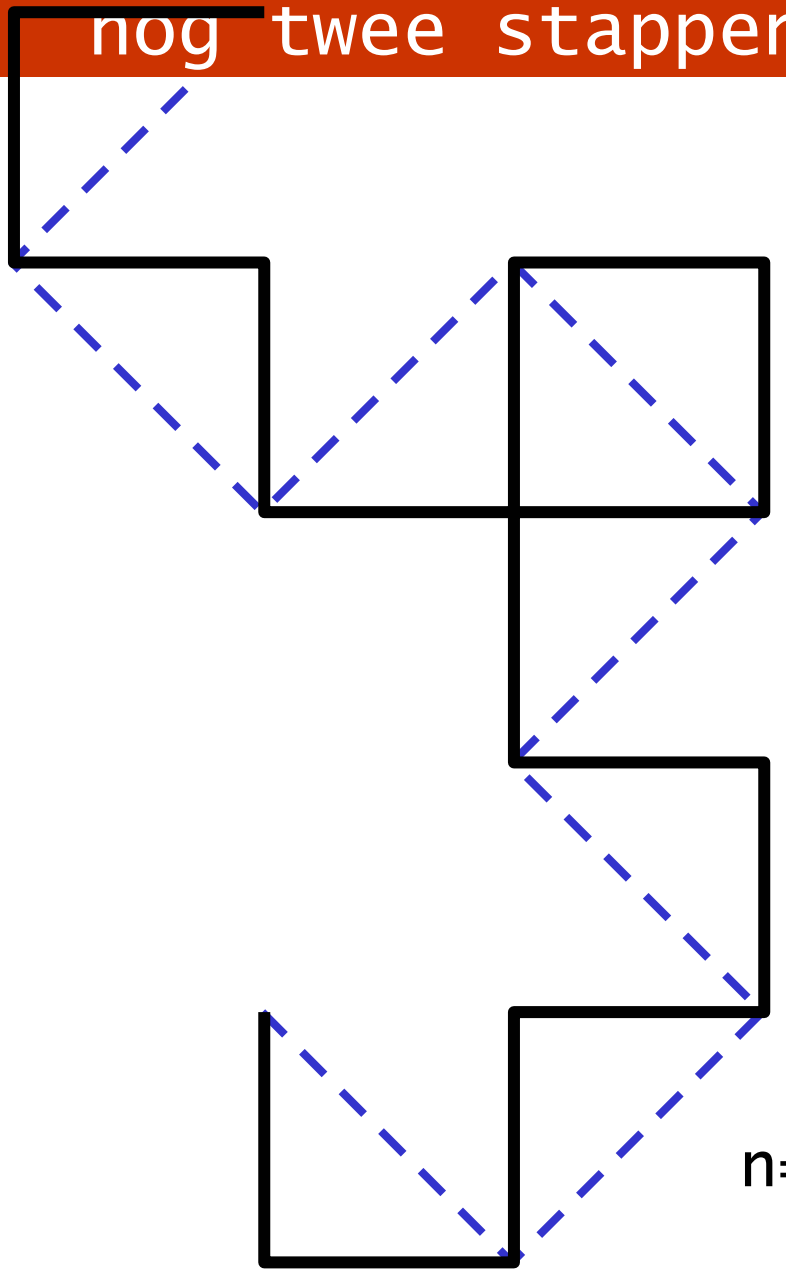
recursie



nog twee stappen

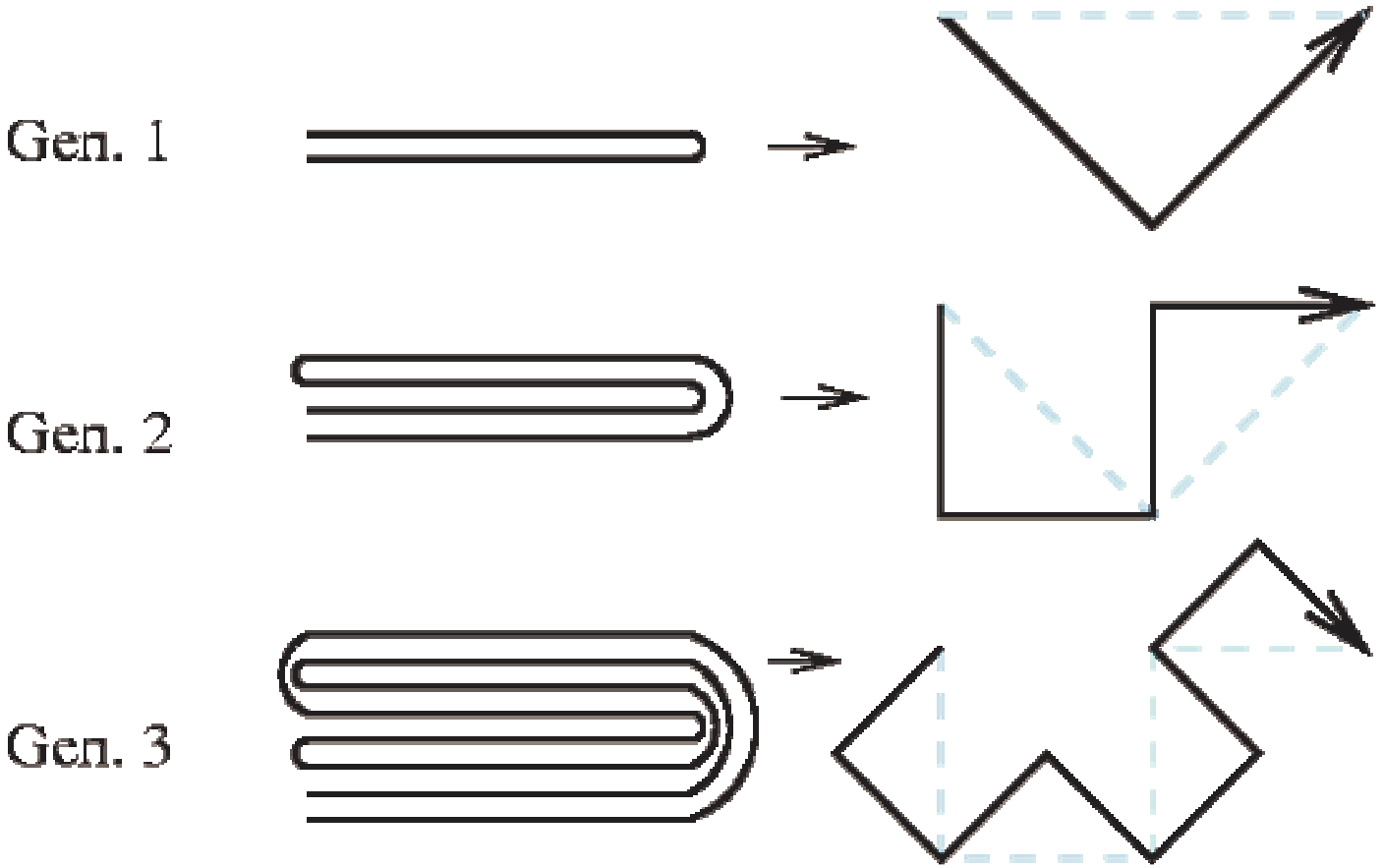


n=3



n=4

terug naar Britney



http://www.math.okstate.edu/mathdept/dynamics/lecnotes/node17.html

dragoncurve

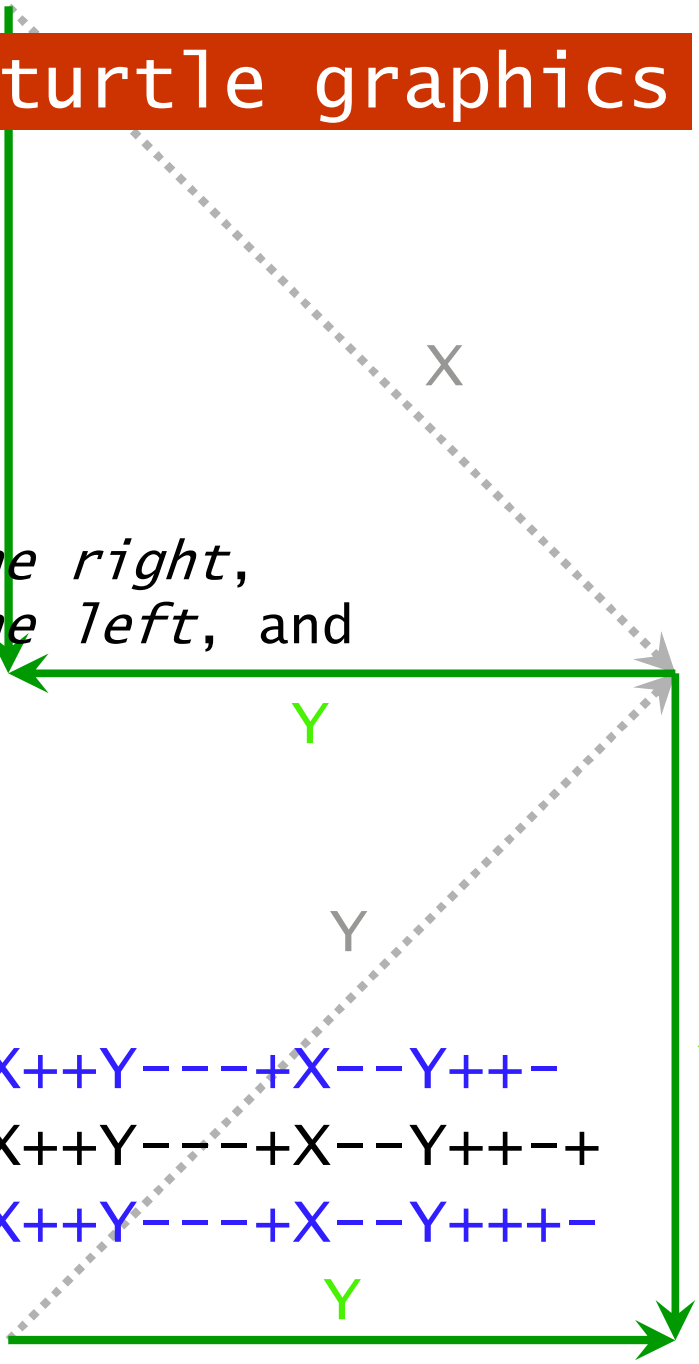
n=12

gedraaid

turtle graphics

```
X -> -X++Y-
Y -> +X--Y+
X,Y represent F
```

where
- means *rotate 45 degrees to the right*,
+ means *rotate 45 degrees to the left*, and
F means *draw forward one unit*.

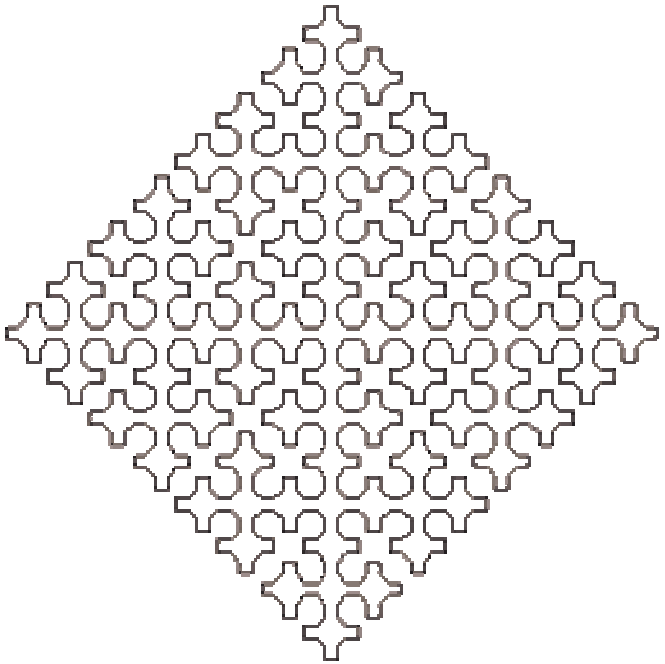



```
1     -X+++Y-
2    --X++Y-+++X--Y+-
3   ---X++Y-+++X--Y+-+++-X++Y---+X--Y++-
4 ----X++Y-+++X--Y+-++++-X++Y---+X--Y++-+
   ++--X++Y-+++X--Y+---+-X++Y---+X--Y+++-
```

Sierpinski

full screen
F4 ghostview
F11 explorer

Java applet



```
Sierpinski {
  Angle 8
  Axiom L--F--L--F
  L=+R-F-R+
  R=-L+F+L-
}
```

postscript definities

```
%!PS
/order 5 def

/X {
  dup 0 ne
  {1 sub 4 {dup} repeat - F X + + F Y -}
  if pop
} def

/Y {
  dup 0 ne
  {1 sub 4 {dup} repeat + F X - - F Y +}
  if pop
} def

/F {
  0 eq { 10 0 rlineto } if
} bind def

/- { -45 rotate } bind def
/+ { 45 rotate } bind def
```

```
newpath
220 180 moveto
50 order { 2 sqrt div }
   repeat dup scale
90 rotate
order X
stroke

showpage
```

end...