

Hilbert curves

A family of curves parametrized by a natural number n . Actually 4 families $A(n)$, $B(n)$, $C(n)$, $D(n)$.

$A(0) = B(0) = C(0) = D(0) \rightarrow$ just a point

$$A(n) = D(n-1) \leftarrow A(n-1) \downarrow A(n-1) \rightarrow B(n-1)$$

$$B(n) = C(n-1) \uparrow B(n-1) \rightarrow B(n-1) \downarrow A(n-1)$$

$$C(n) = B(n-1) \rightarrow C(n-1) \uparrow C(n-1) \leftarrow D(n-1)$$

$$D(n) = A(n-1) \downarrow D(n-1) \leftarrow D(n-1) \uparrow C(n-1)$$

