

1.

Chaikin

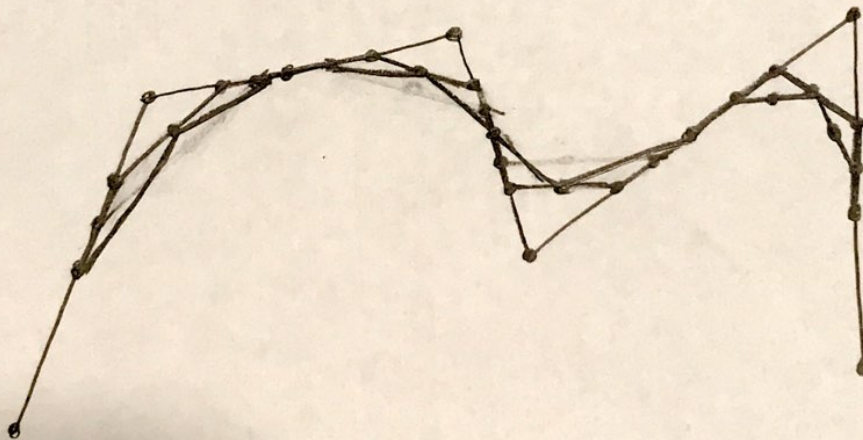


Divide into

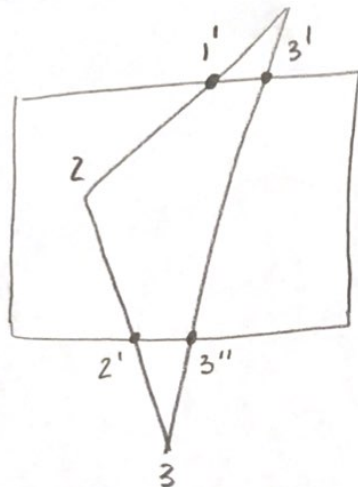
$\frac{1}{4} - \frac{3}{4}$ quarters

Catmull-Clark

use - "mid-point"



(3)



Left	R	T	B
in-in	in-in	out-in	in-in
$\{2, 3\}$	$\{2, 3\}$	$\{1', 2\}$	$\{1', 3\}$
in-in	in-in	in-in	in-out
$\{3, 3\}$	$\{3, 3\}$	$\{3, 3\}$	$\{2', 3\}$
in-in	in-in	in-out	out-in
$\{1\}$	$\{1, 3\}$	$\{3', 3\}$	$\{3'', 3'\}$
$\{1, 2, 3\}$	same	$\{1', 2, 3, 3'\}$	$\{1', 2, 2', 3'', 3'\}$