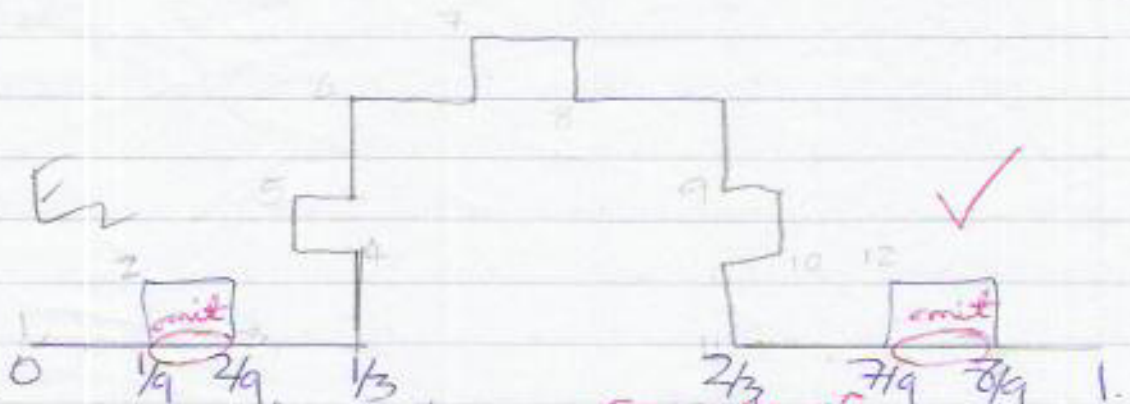


7

$$3\frac{1}{2}$$



b) At each stage we make 5 copies of itself scaled by a $1/3$. the similarity dimension is $\frac{\log 5}{\log 3}$ ✓

A pair of dividing set at length $\frac{1}{3^k}$ for some $k \in \mathbb{N}$ takes 5^k steps to traverse F .

c)	δ	$\log \delta$	$M_\delta(F)$	$\log M_\delta(F)$
take points	δ	$\log \delta$	1	0
x_0, \dots, x_n to be	3^{-1}	$\log 3$	5	$\log 5$
where straight	3^{-2}	$2 \log 3$	25	$2 \log 5$
lines meet then	3^{-3}	$3 \log 3$	125	$3 \log 5$
$ x_n - x_{n-1} = 3^{-R}$ ✓	3^{-4}	$4 \log 3$	625	$4 \log 5$
$M_\delta(F) = 5^R$ ✓	3^{-5}	$5 \log 3$	3125	$5 \log 5$ ✓

