4/10/2023 70. Climbing Stairs

$\frac{n}{2} =$

$\frac{5}{2} = 2$

od

1: ← $n = 5$

od

2: ← $\frac{n}{2}$ 2

od

3: If $\frac{n}{2}$! = 0

2 if n/2 == 0

3rd

4th

f(1) = 1

f(2) = 2

f(3) = 3

f(4) = 5

f(4)

↓

f(3) +

f(2) +

f(1)

5 ways

$f(1) = 1$

$f(2) = 2$

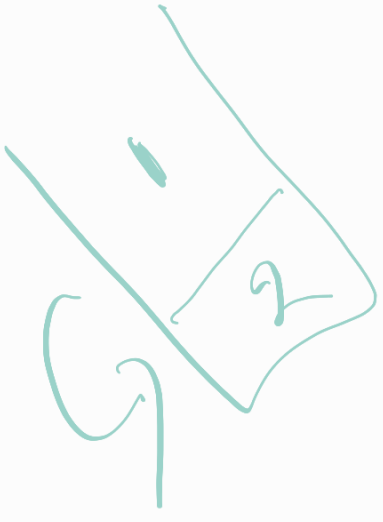
base Condition

$f(3) = f(2) + f(1)$

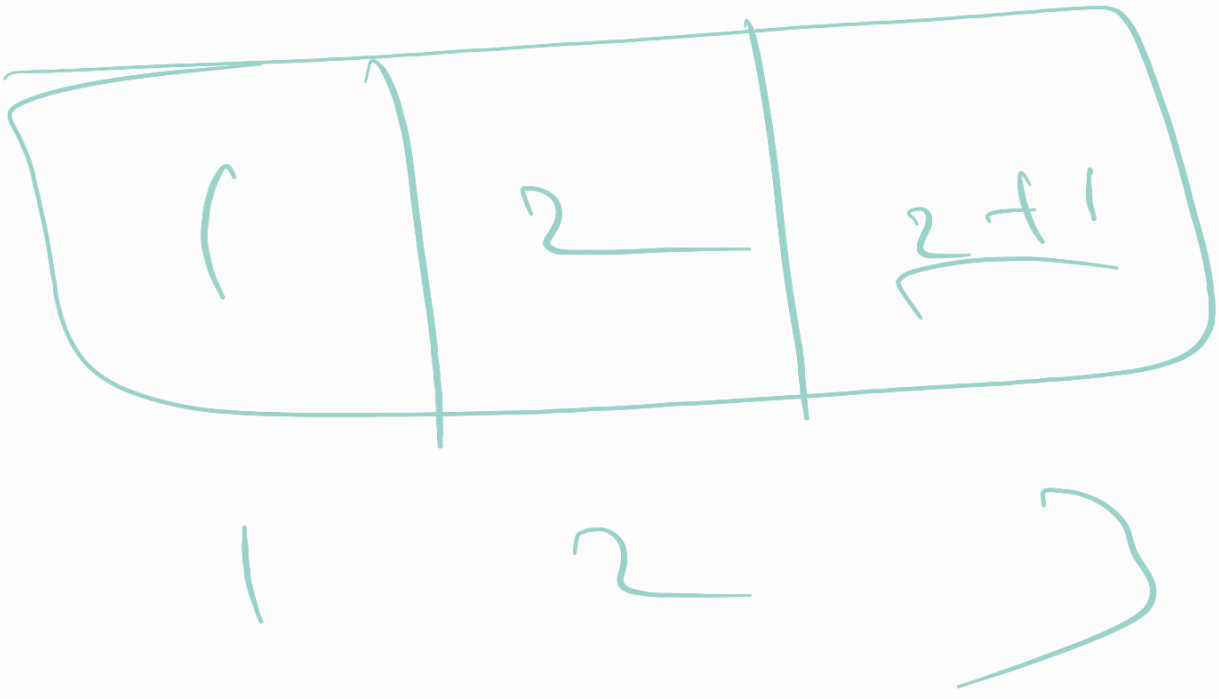
$= 2 + 1$

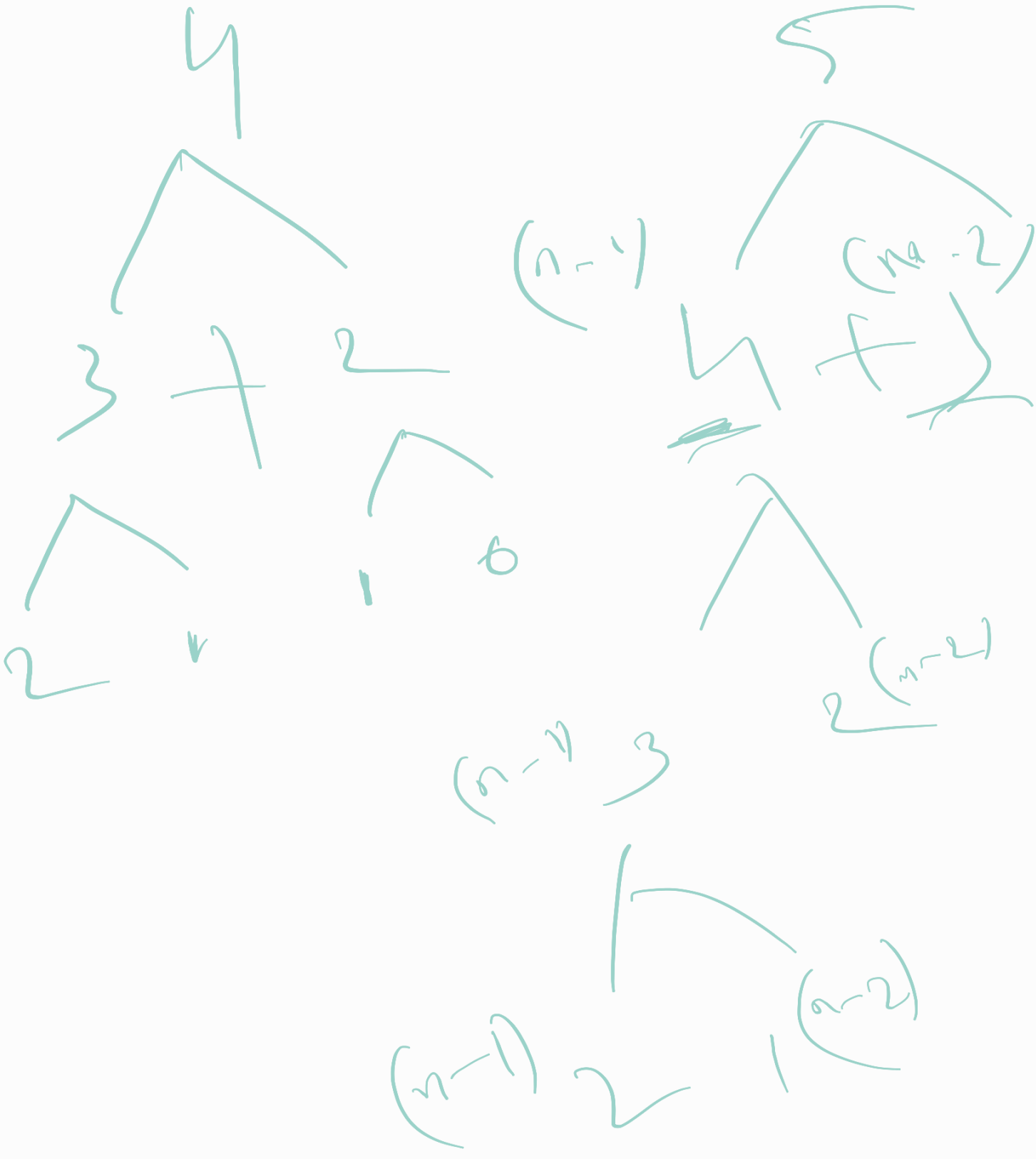
$= 3$

$f(3)$



$f(n) = f(n-1) + f(n-2)$





Stairs $(n-1)$ + Stairs $(n-2)$

$S(4) + S(3)$

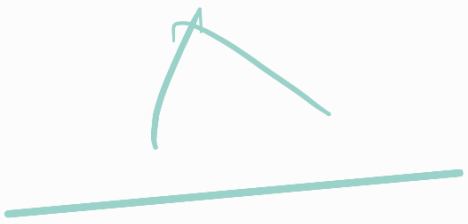
$f(n-1) + f(n-2)$

4 3

3
2
1
1
0
1

1
2

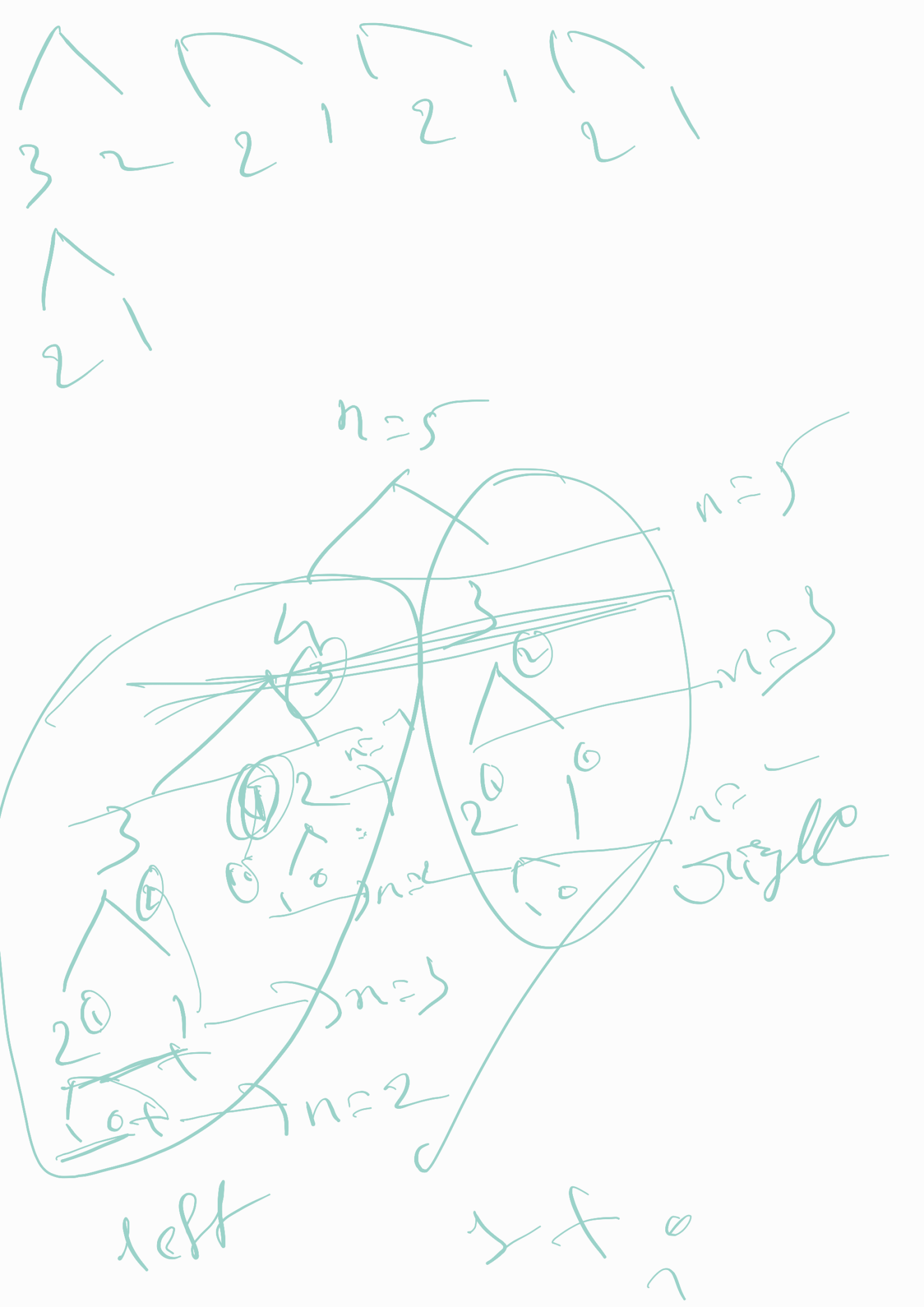
f(3, 0)



Sum: 0

sum + f(n-1, sum)

2, 0


n=5
n=5
n=5
n=3
n=2
n=2
n=1
n=1
n=1

FIN
2
3
4
5