n plates

eq
2 ...
3
4
6

$C_1 \dots C_m$
positions

2 2 2
2 2 2

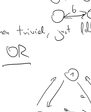
2 2 2

midPoint endPoint
endpoints

x y x
y z x

toPoint

either n have nodes (A)



then trivial, just follow that path

OR

(B) loop by a

abb } repeat
loop } loop

works if (1) n even
(2) n > 2

(C) n=2 special case

(D) n odd

3 nodes!

(D) is wrong... :(

$\mathbb{Z}\mathbb{Z}$ is not a problem!

(B)

ababa ← works for odd n!

(C) n even

Node types:

easy

easy

all eq.

split

Even n?

ALG A ALG B

at most 1 of each!

(C1) ≥ 4 nodes: easy just avoid nodes!

(C2) 2 nodes

-1

(C2) 3 nodes

A side

B side

special case

2 aa | bb
4 abba

otherwise

ababab } bababa

(*) ba aba
loop: ab bab

(A) ab

(B) ba

A side

B side

X
Y
Z

n=6
0 1 2 3
x y x y
n=3

0 1 2
2 y 2

n=6 n=4

[y x y] z y

aba

abababa

aba | aba