3

Honewoock 6

2 Set 3; S; ... S; denote the Substeing

OPT(K) denotes whether S; K Can be

Segmented. OPT(K)=1 if it can be

Segmented and O otherwise.

Segmentation is possible if and only

If the last would in the Substag

is a part of the dictionary and

the lemaning as be segmented.

OPT(K) = max opt(F)

O=i < K and S; yx

is a part of

The clifforary

We intialize opt(O)=1 and then compute

for K=1...- n. The assuele collespending

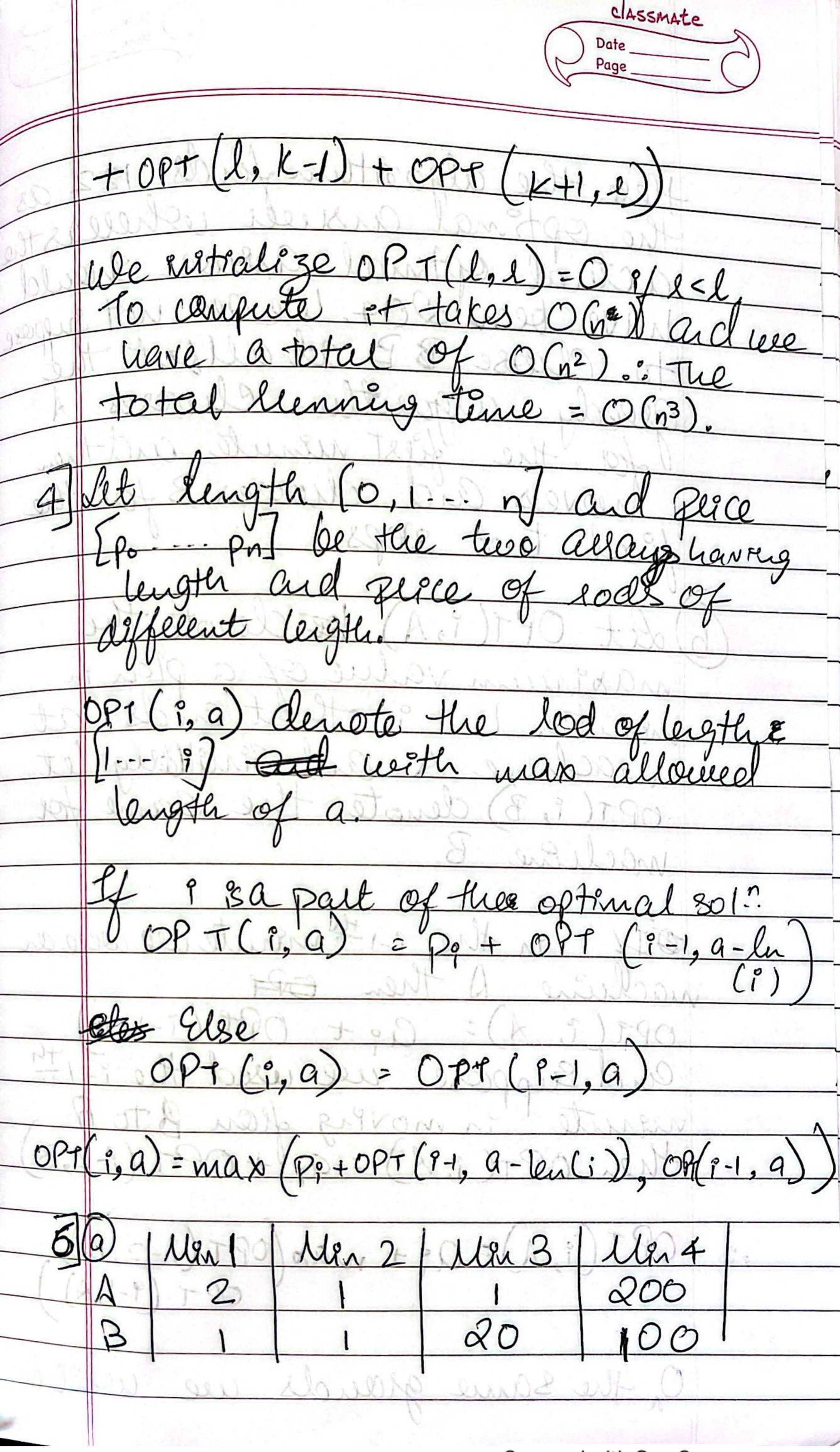
for k=1...- n. the arsuell collesperation to OPI(n) 98 the optimal are and the takes O(n²) to compute.

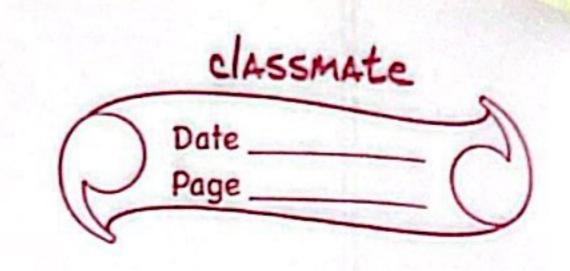
21 Let OP1 (l, e) be the maximum
no. Of Cains we can obtain by
bues thing the balloans. Over here
we have to determine we
balloan to buest last. Let's say
K 93 the balloan 95 want to benst
last. Therefore all the other balloans
have to be buested before k.

OPT (fd) = freue (k) \* reems (l-1) \*\*

Nums (l+1)

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Here the algorithm firds 122 as
the optimal arriver wheleas the
actual optimal arriver should
have been 204. We are not suppose
to choose & B at all pert the
greedy algorithm chooses I
for the first number and then
moves and chooses & for the
first two steps.

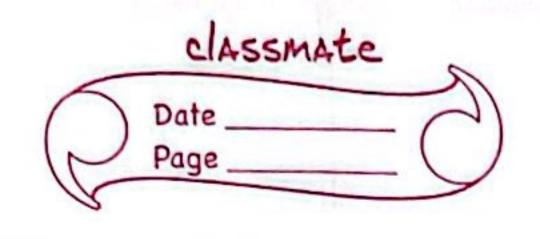
(b) Let OPT(i, A) to clenate the masisum veilue of a plan in minutes 1. i that ends at machine A and Similarly let opT(i, B) denote the Same for machine B.

racline A then the oppose we used the 1-1th regule in moving from B to F7

Then OPT(i, A) = a, + OPT (9-2,B)

OPT (i, A) = Q; + max (OPT (i-2, B),
OPT (9-1, A))

Or the same grands me well be



Il On the same grands or wellich Tuel use OP & (K, w) for the # O-1 trapsack title class. OPT(K, w) devote the Value of the potimal soit with was Over here of k ps judieded in Alle 30100 then use can 8till use the Same K for the next filling of releights as we have

