Edu-110

Friday, 4 June 2021 11:25

3 6 5 3

[2] [×2]

#2^2

0 ? 1 0

0→1 0→1 × 0→3

× 1→2 1→2

✓ ✓ ✓ ✓

0 ? 1 0

0→1✓ 0✓ 1✓ 0✓

1→✓

✓ _ _ _ _

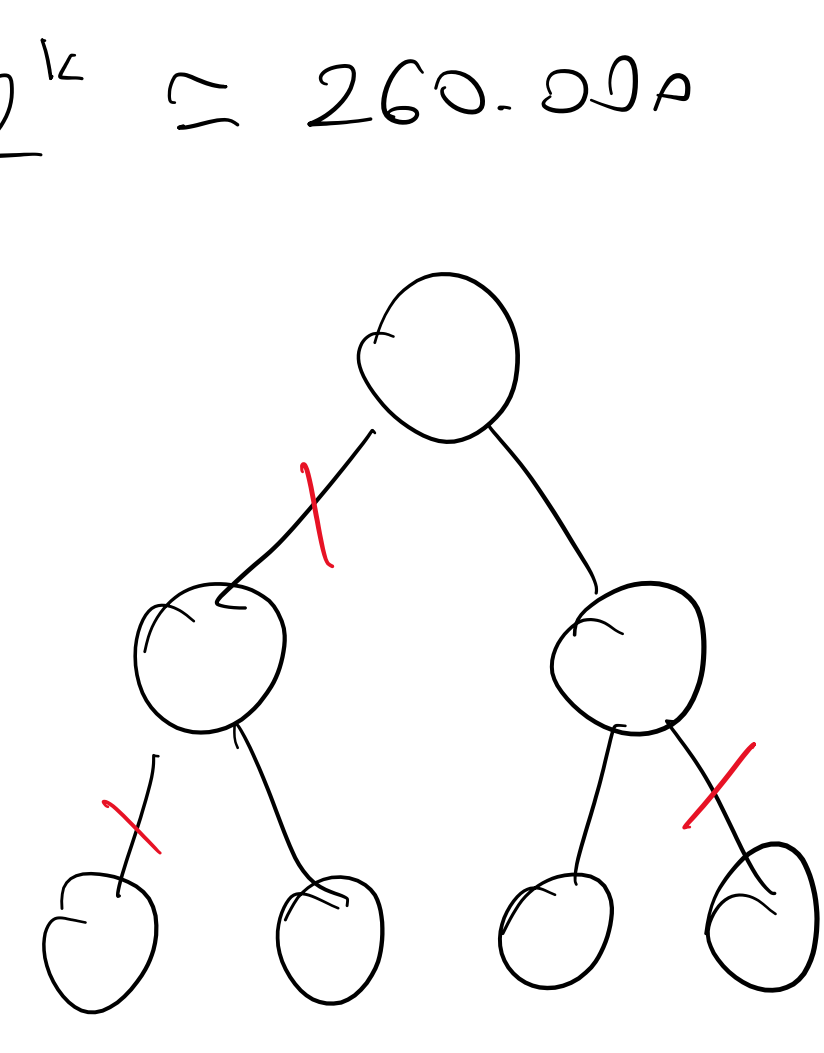
0 1

0 1

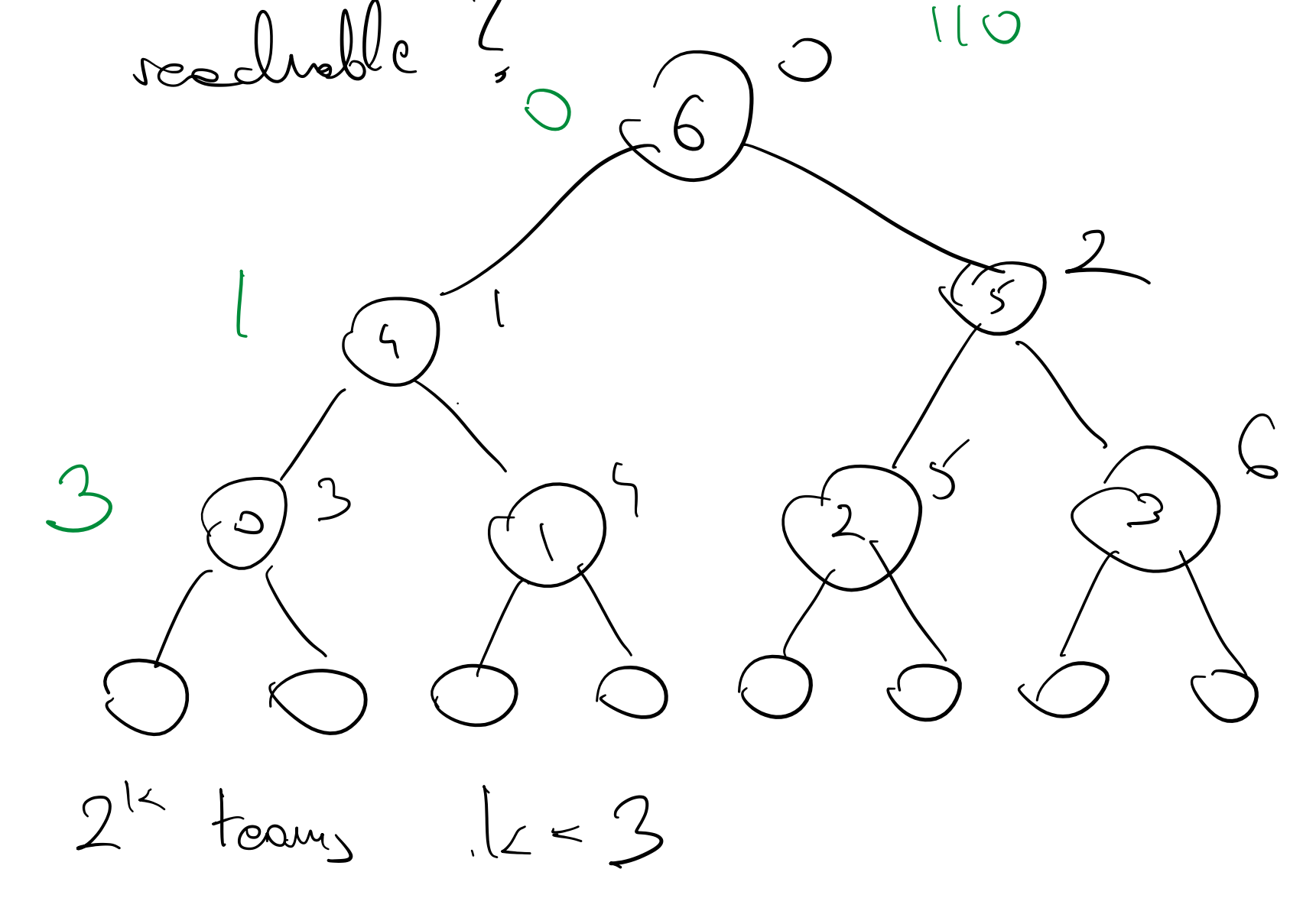
1 0

0 1 0

$2^k \simeq 260.000$

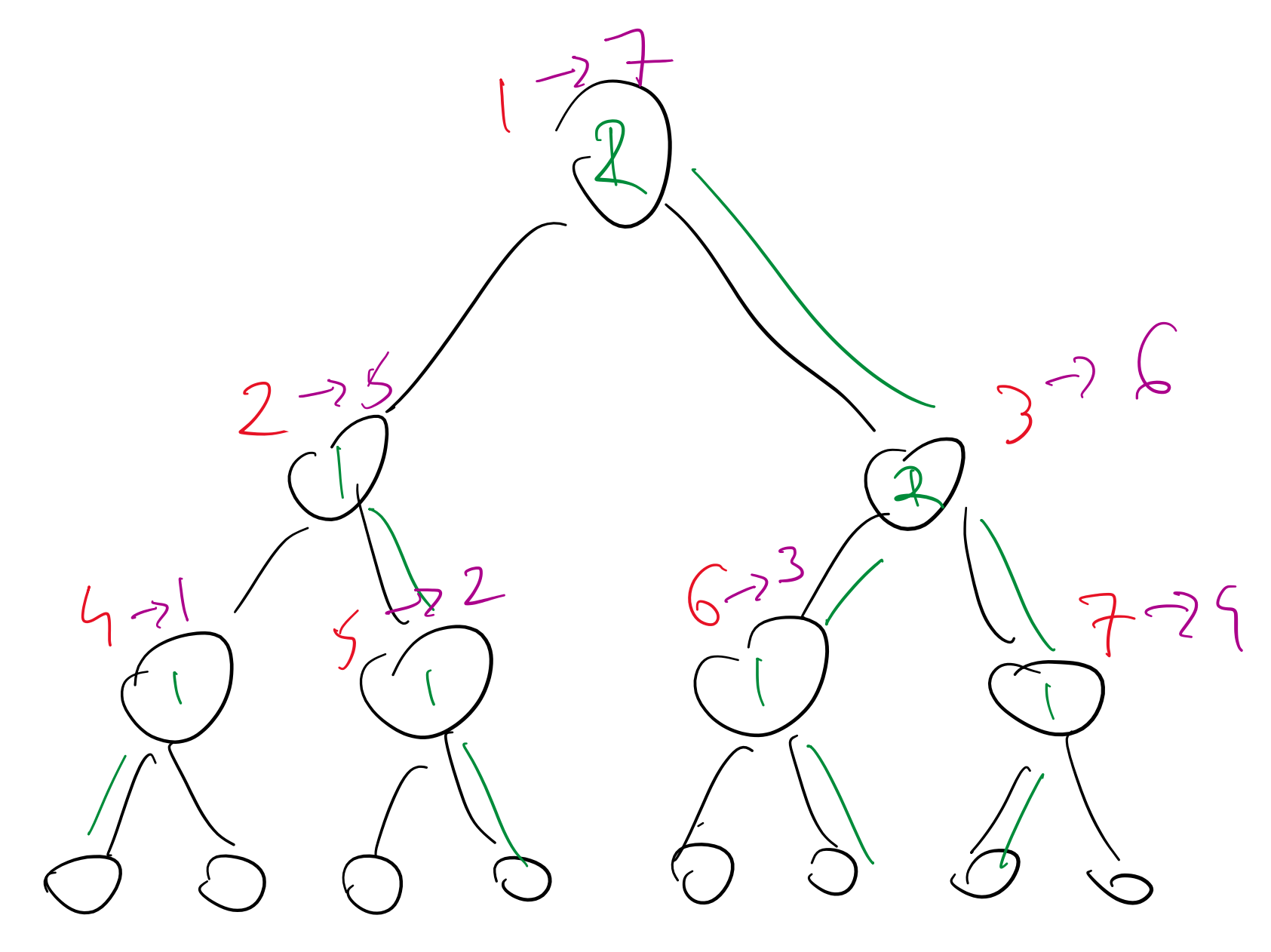


Q: How many leaves are reachable?



2^k teams k<3

tree size: $2^{k+1}-1$



1

2 3

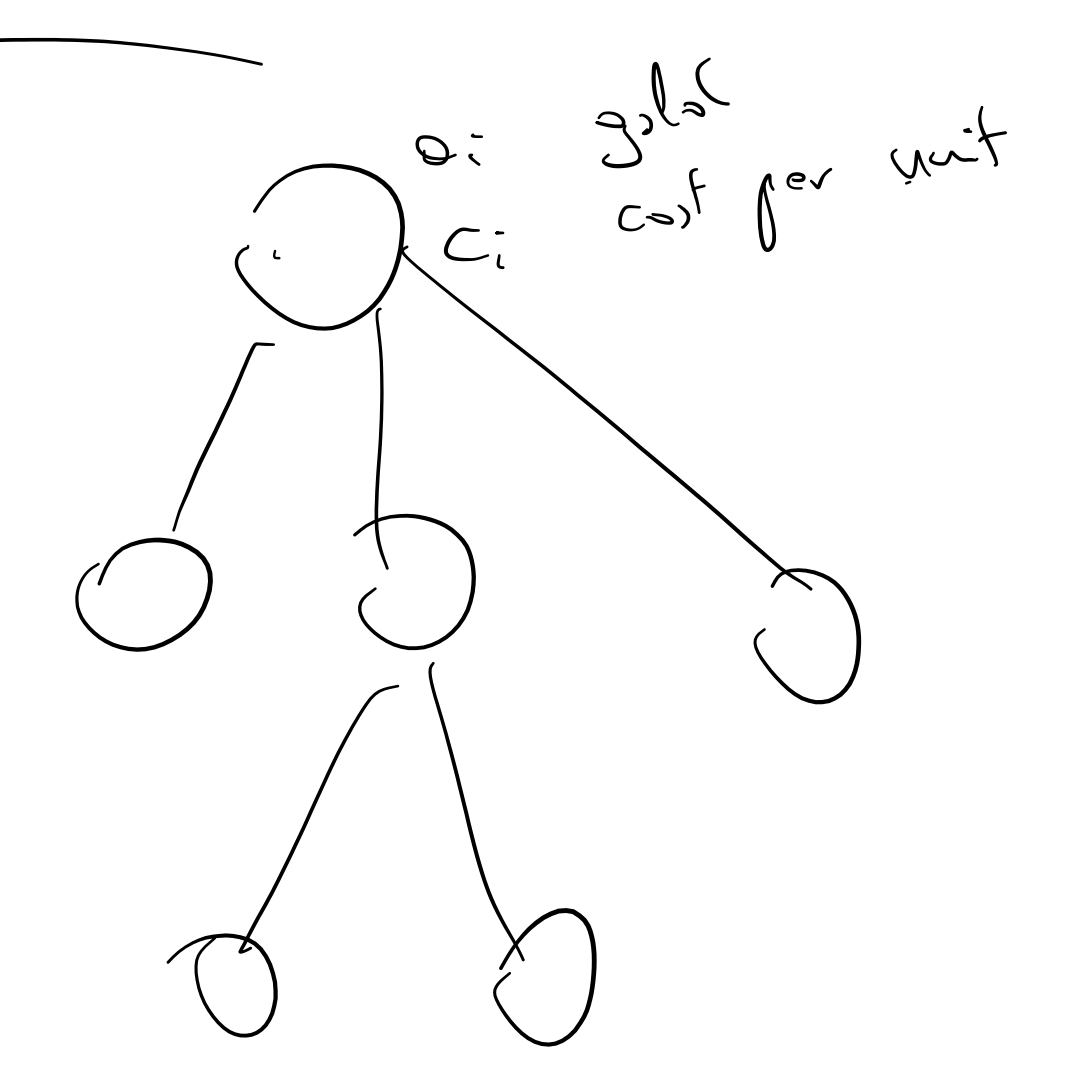
4 5 6 7

8 9 10 11 12 13 14 15

1 2 3 4

5 6

7

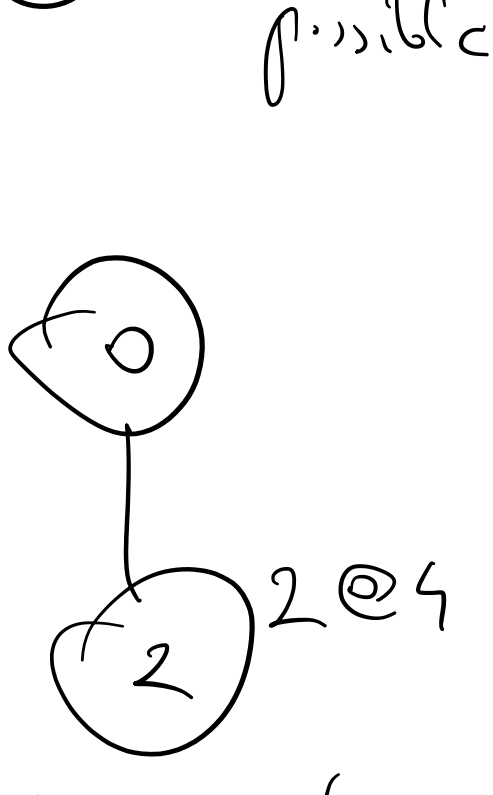


a_0

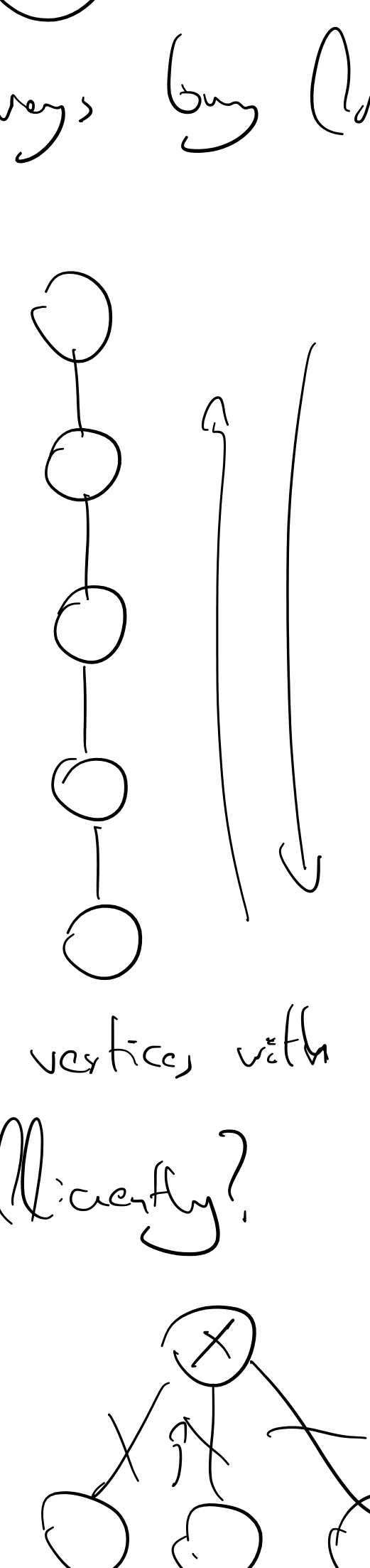
c_0

- add son (more gold than parent)
- start at vertex
  go to root
  buy up to w_i as cheap as possible

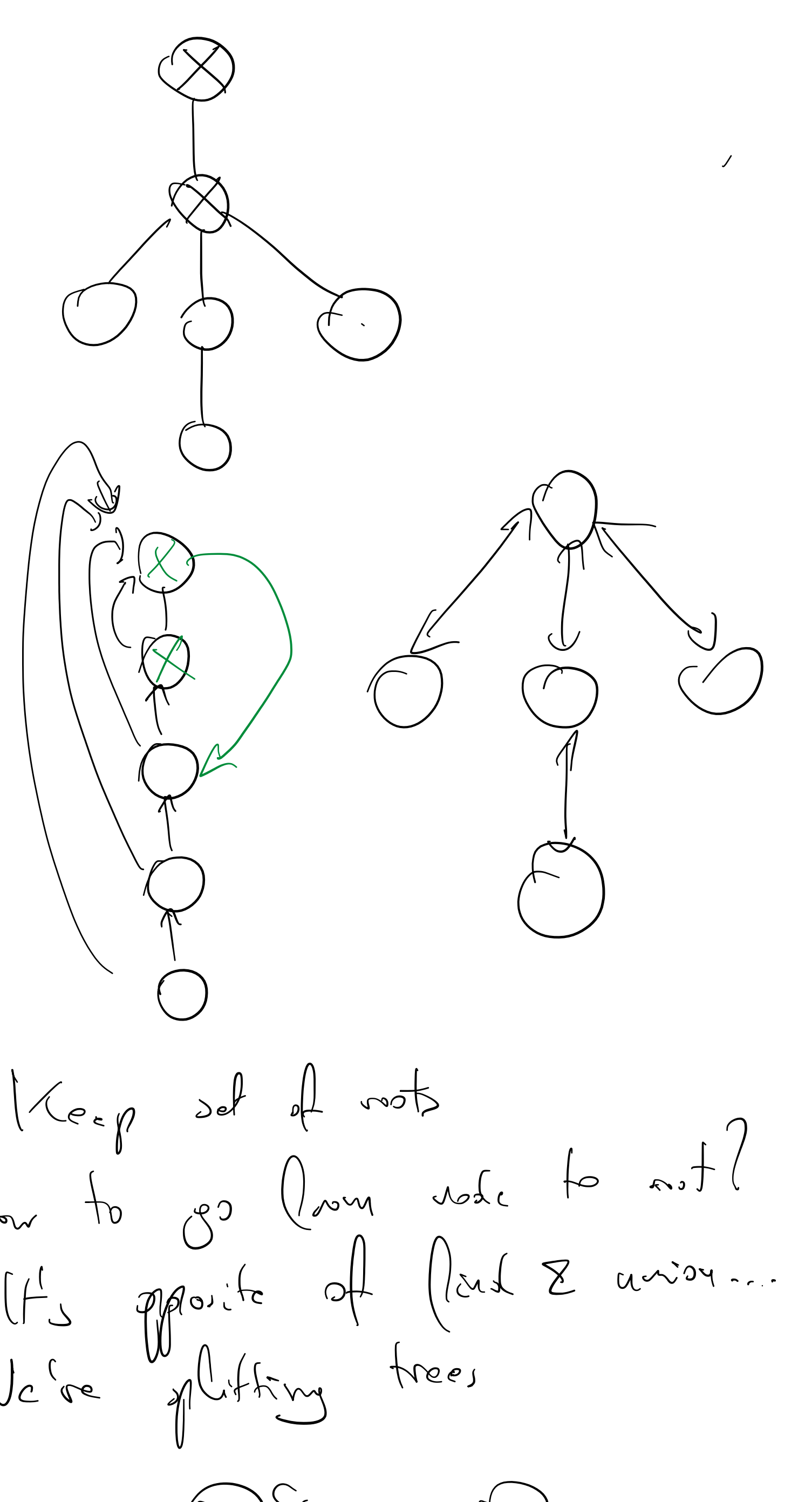
buy: 2+2



always buy from root downwards



drop vertices with 0 gold efficiently?

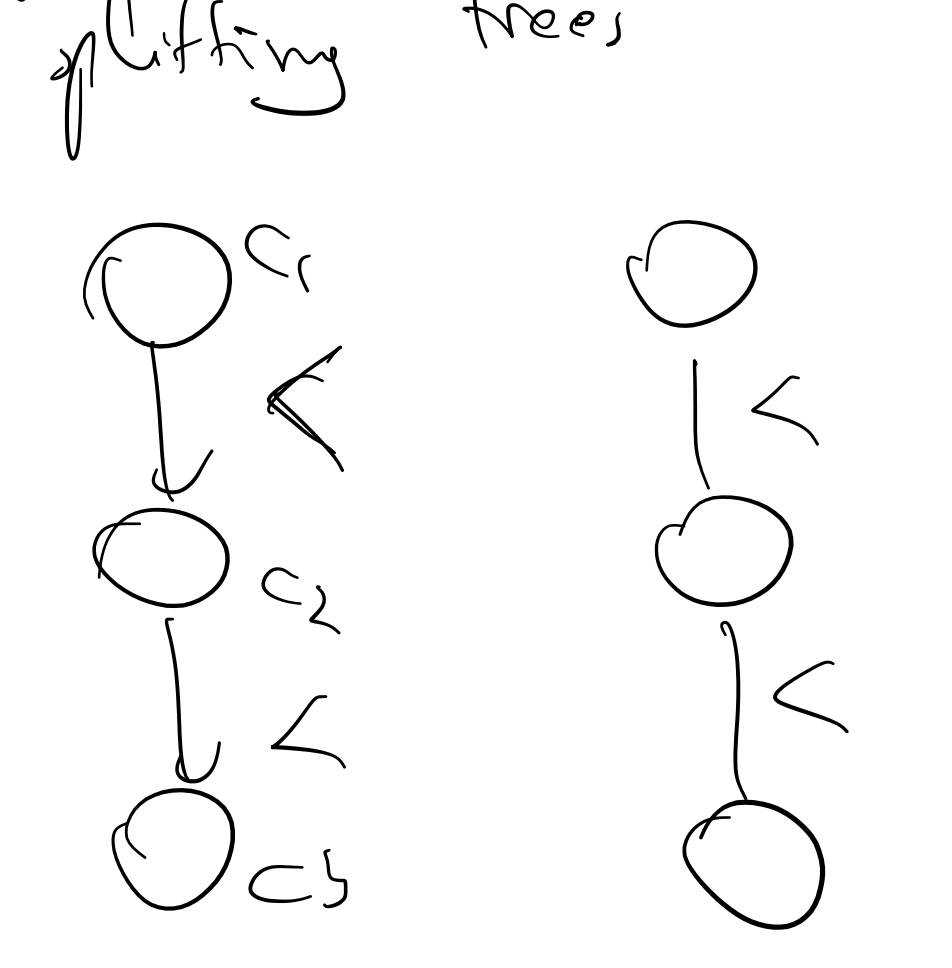


Keep set of roots

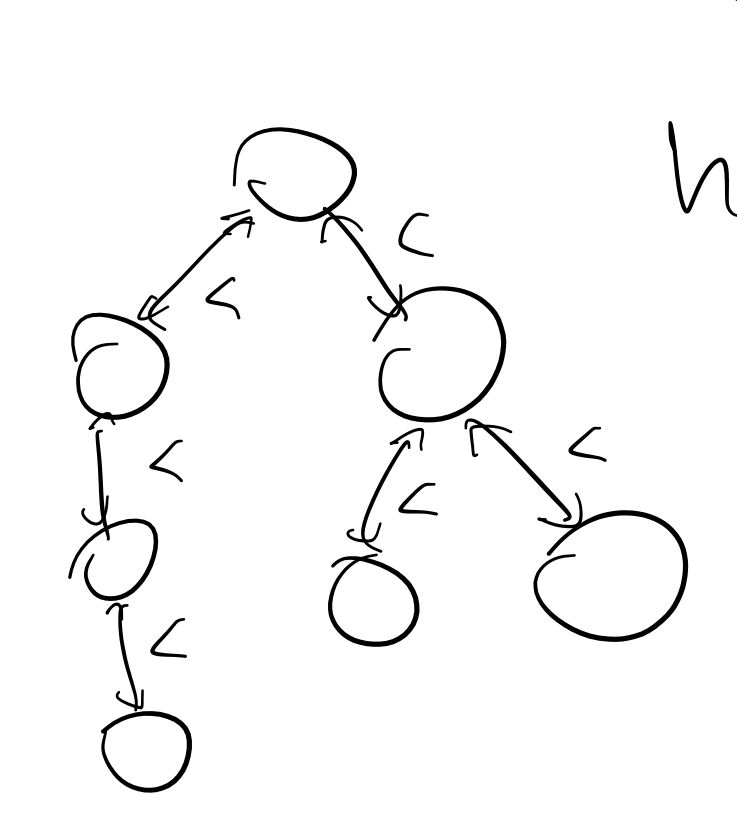
How to go from node to root?

It's opposite of find & union...

We're splitting trees



heap-like



How to find ~~root~~ quickly