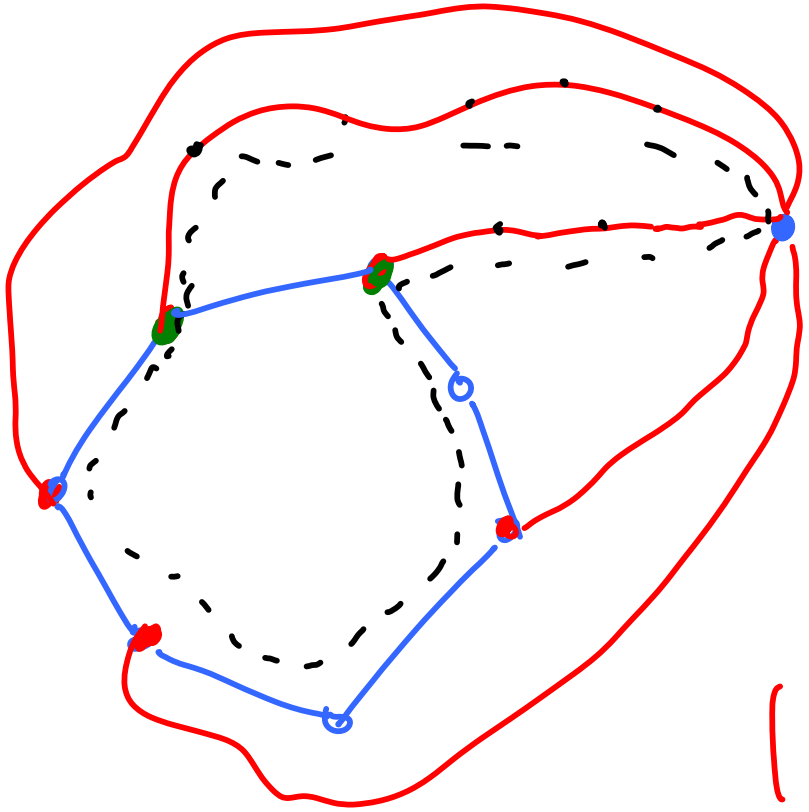
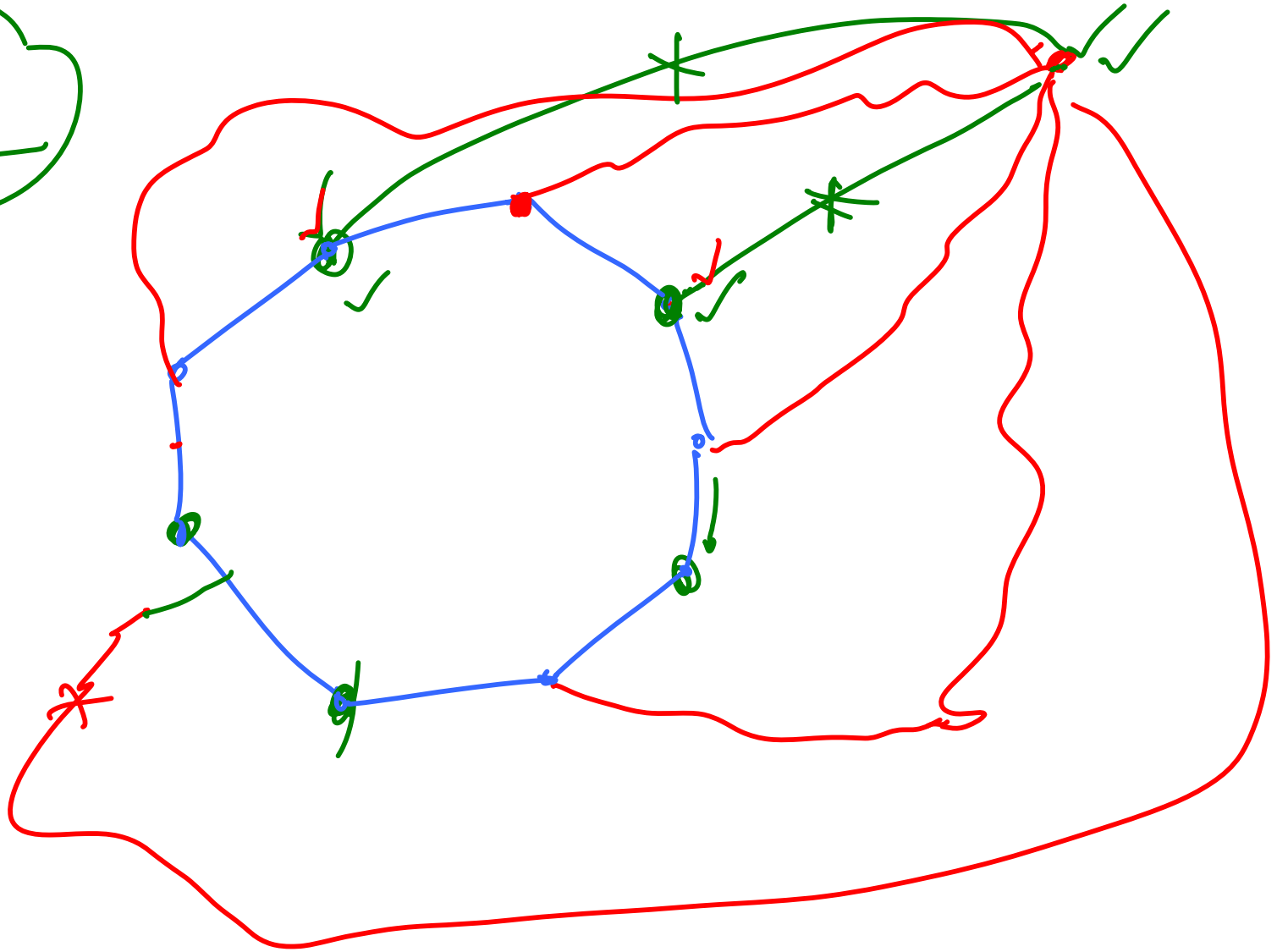


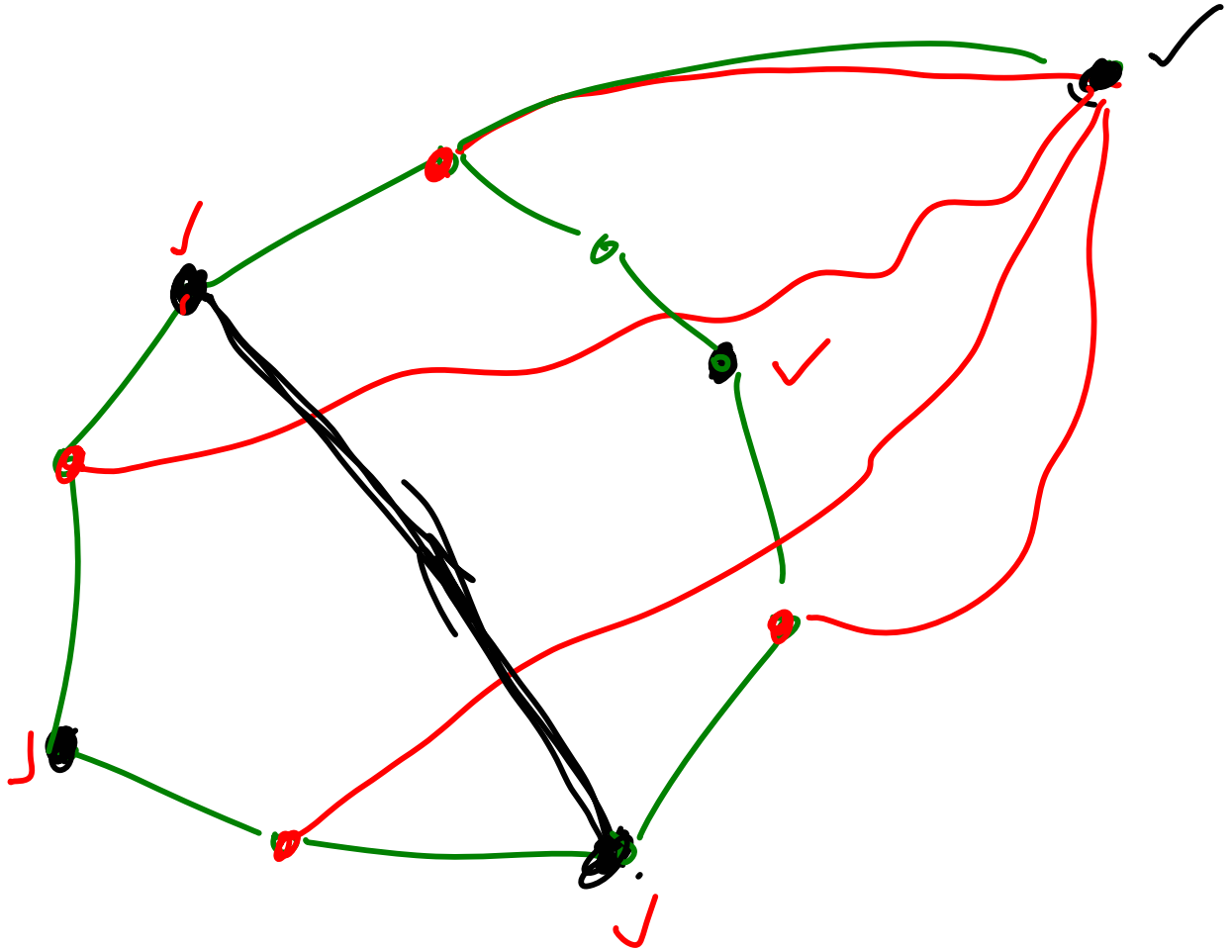
$|C| > 2^{k}$

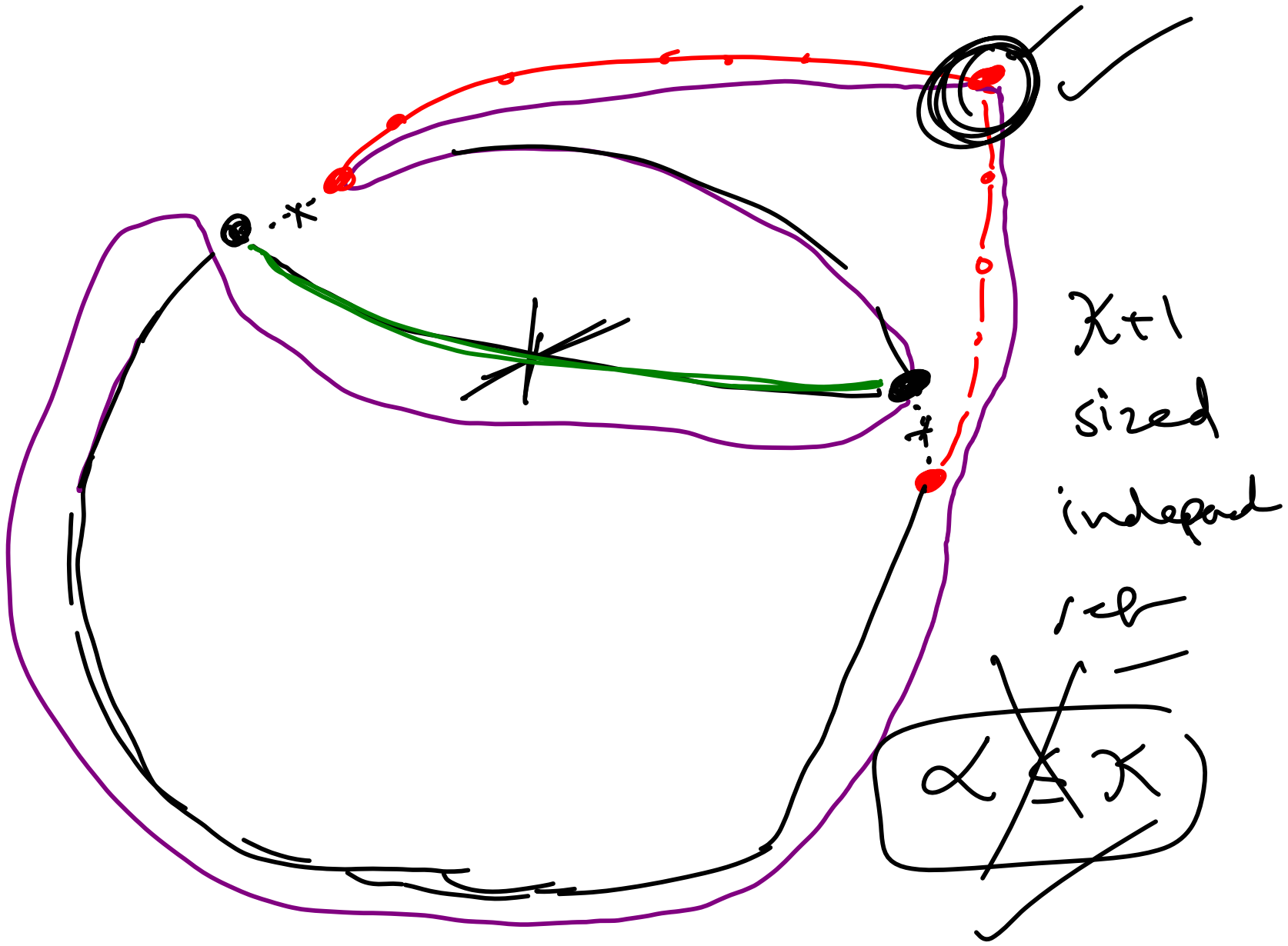
$\alpha \leq \kappa$

α

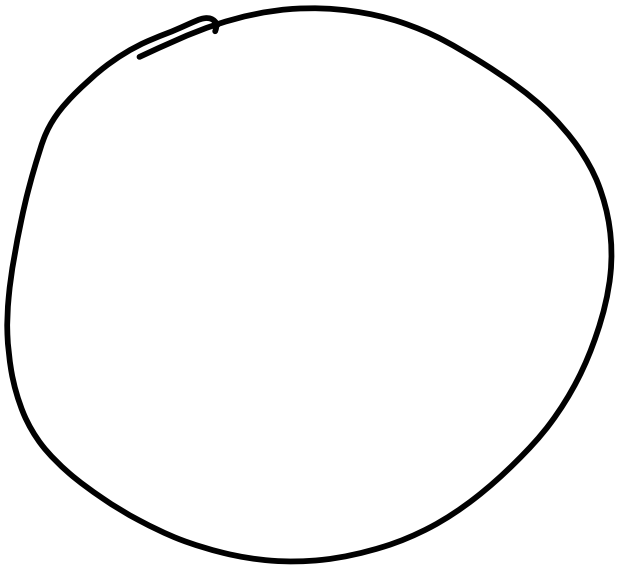
$\kappa + 1$






x
t
χ+1
sized
independ
set
α ≤ χ

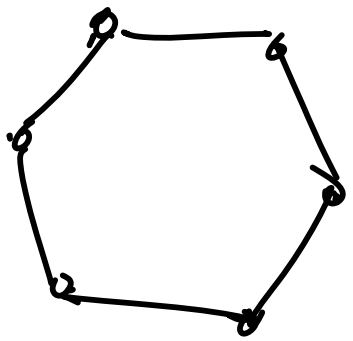
$\alpha \leq \aleph$ ✓



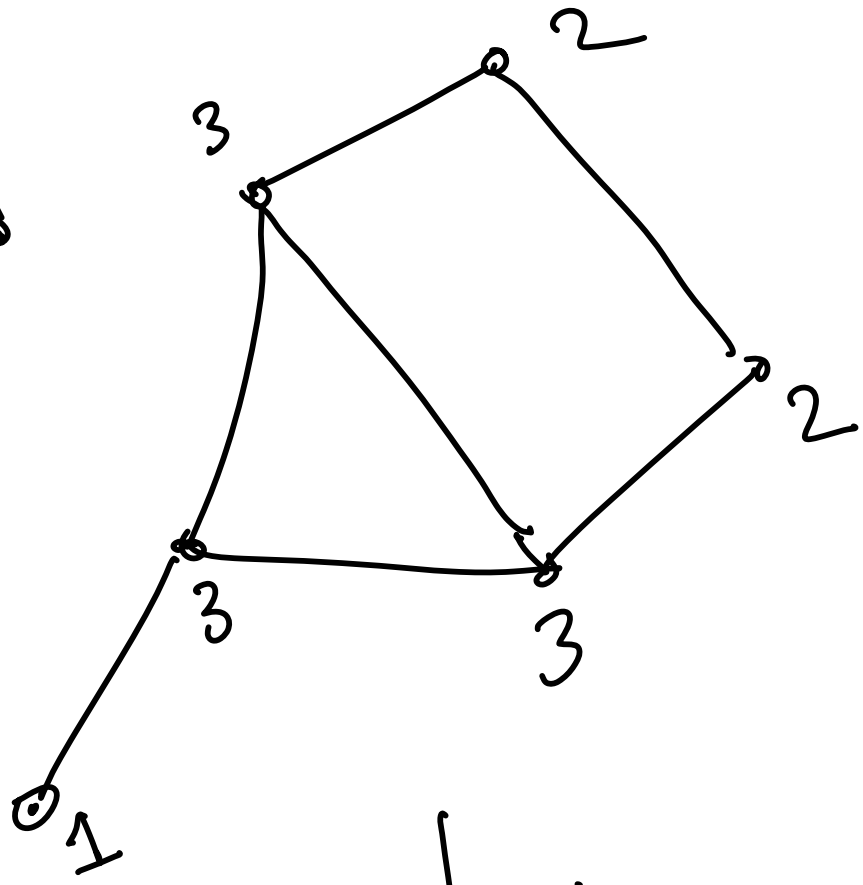
:✓

✓

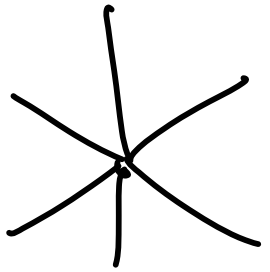
1



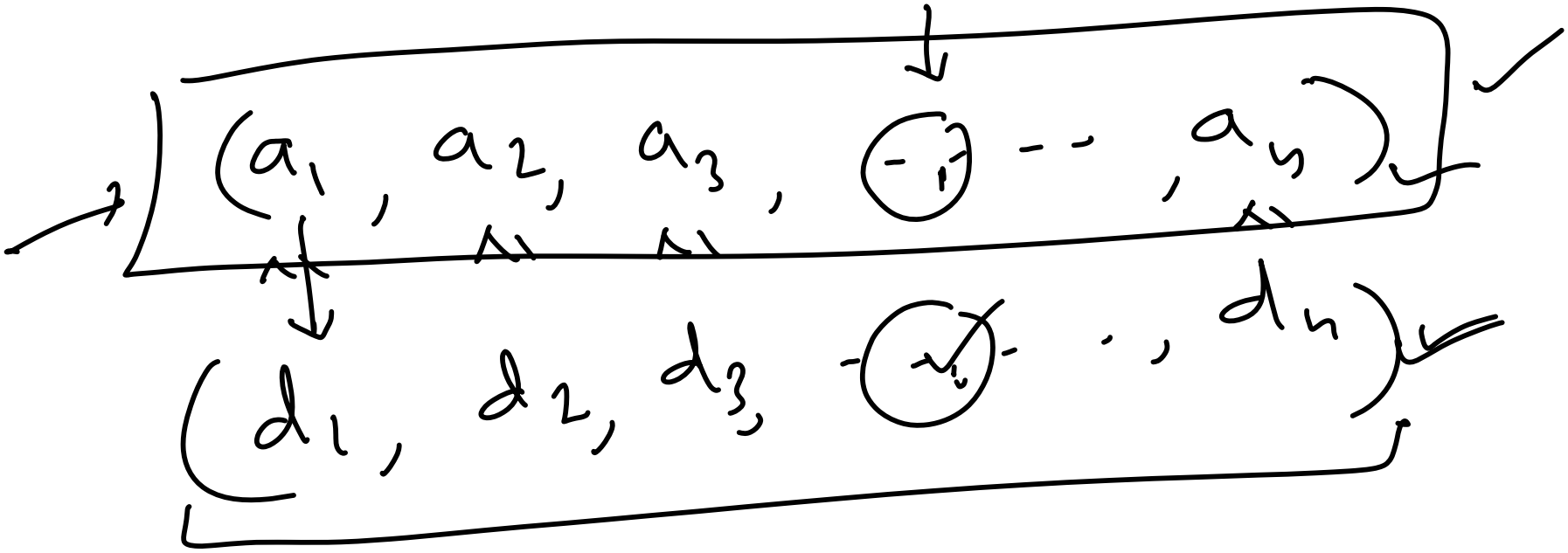
1, 2, 2, 3, 3



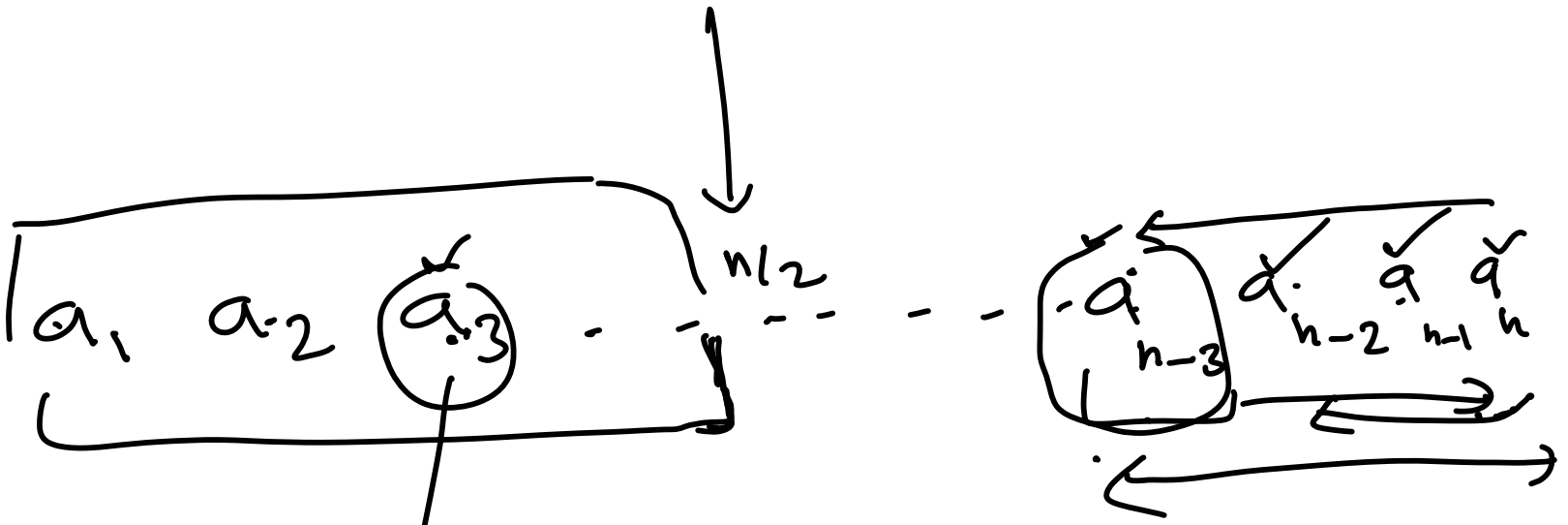
2, 2, 2, 2, 2, 2



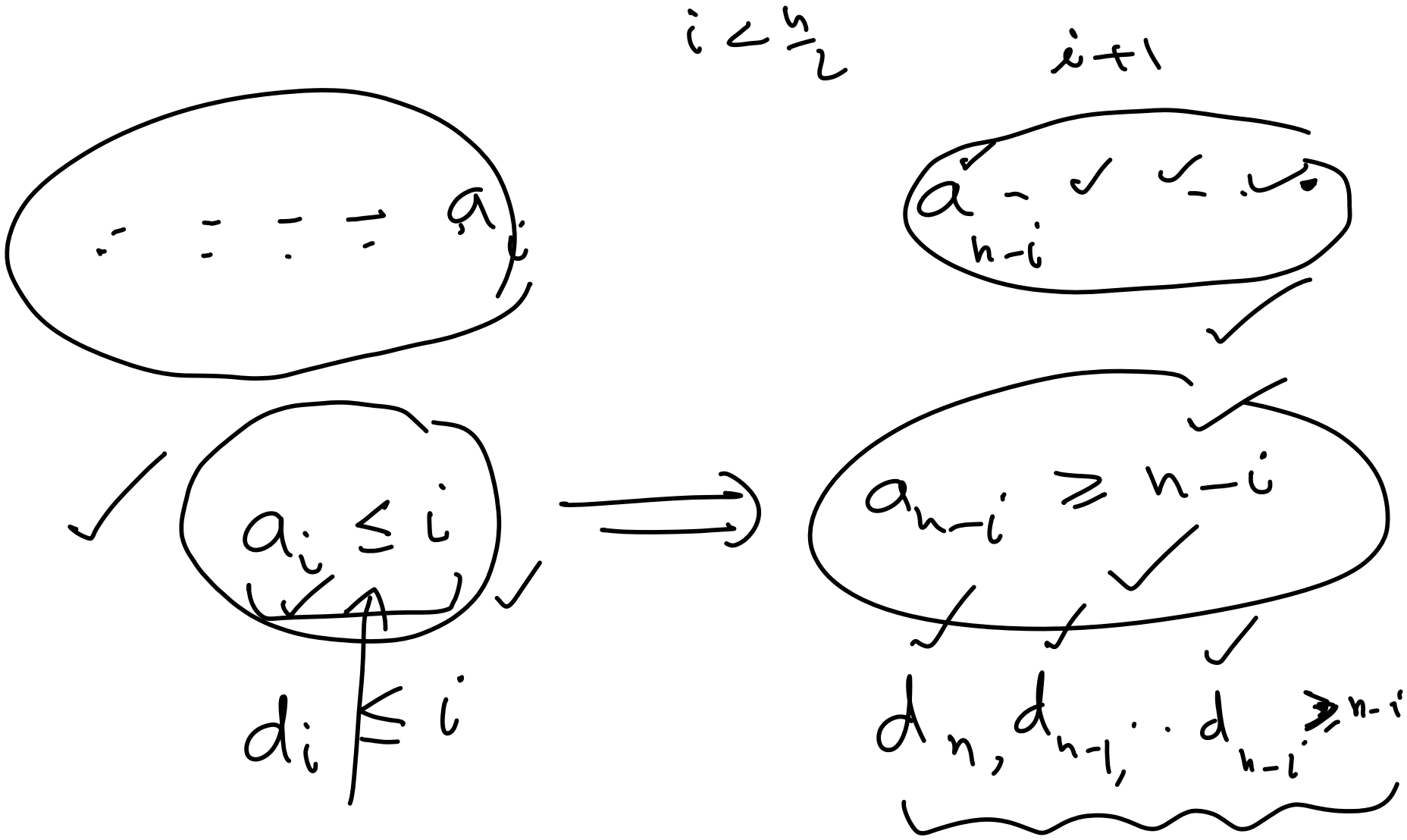
1, 1, 1, 1, ... , n−1

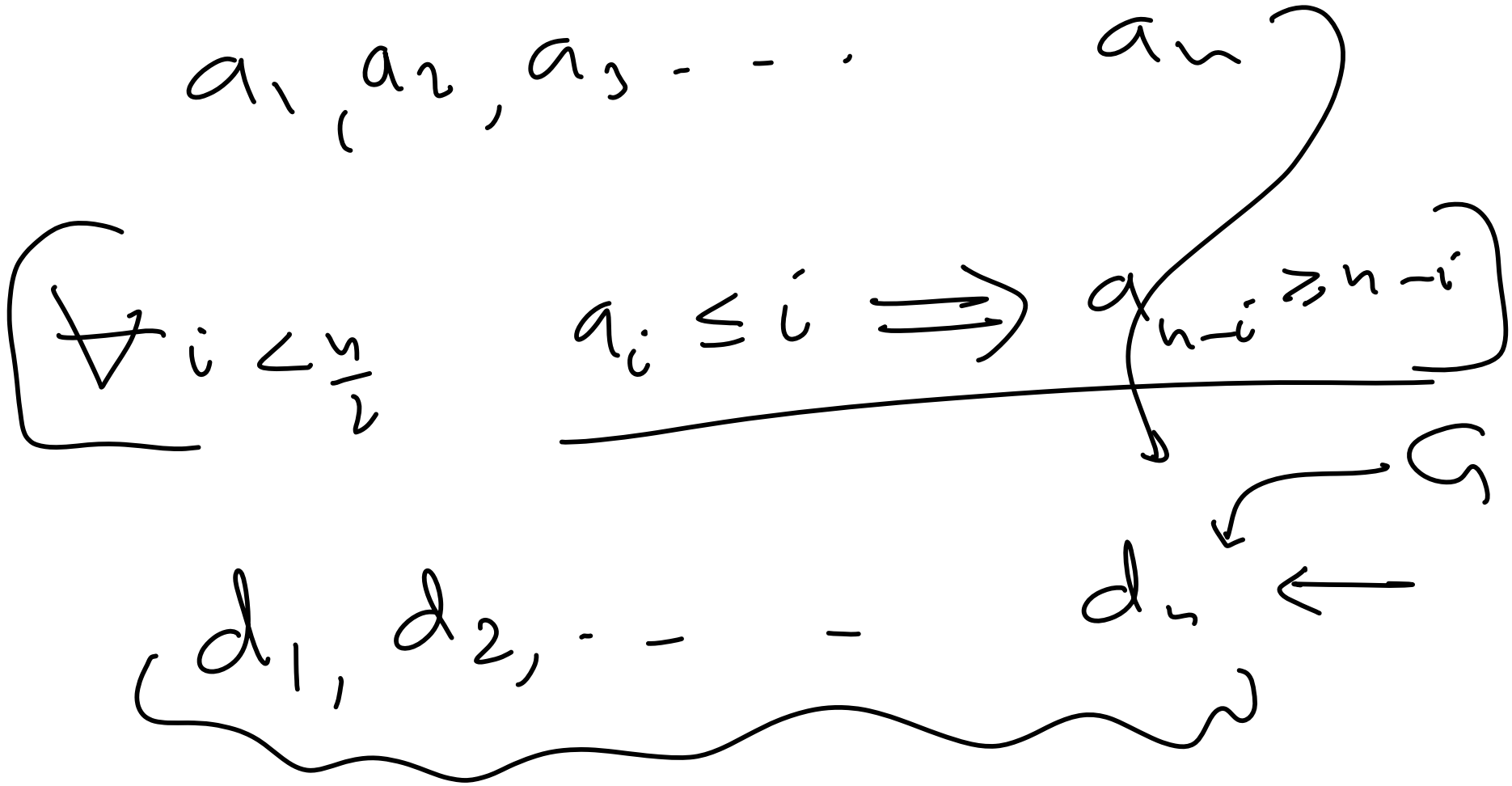


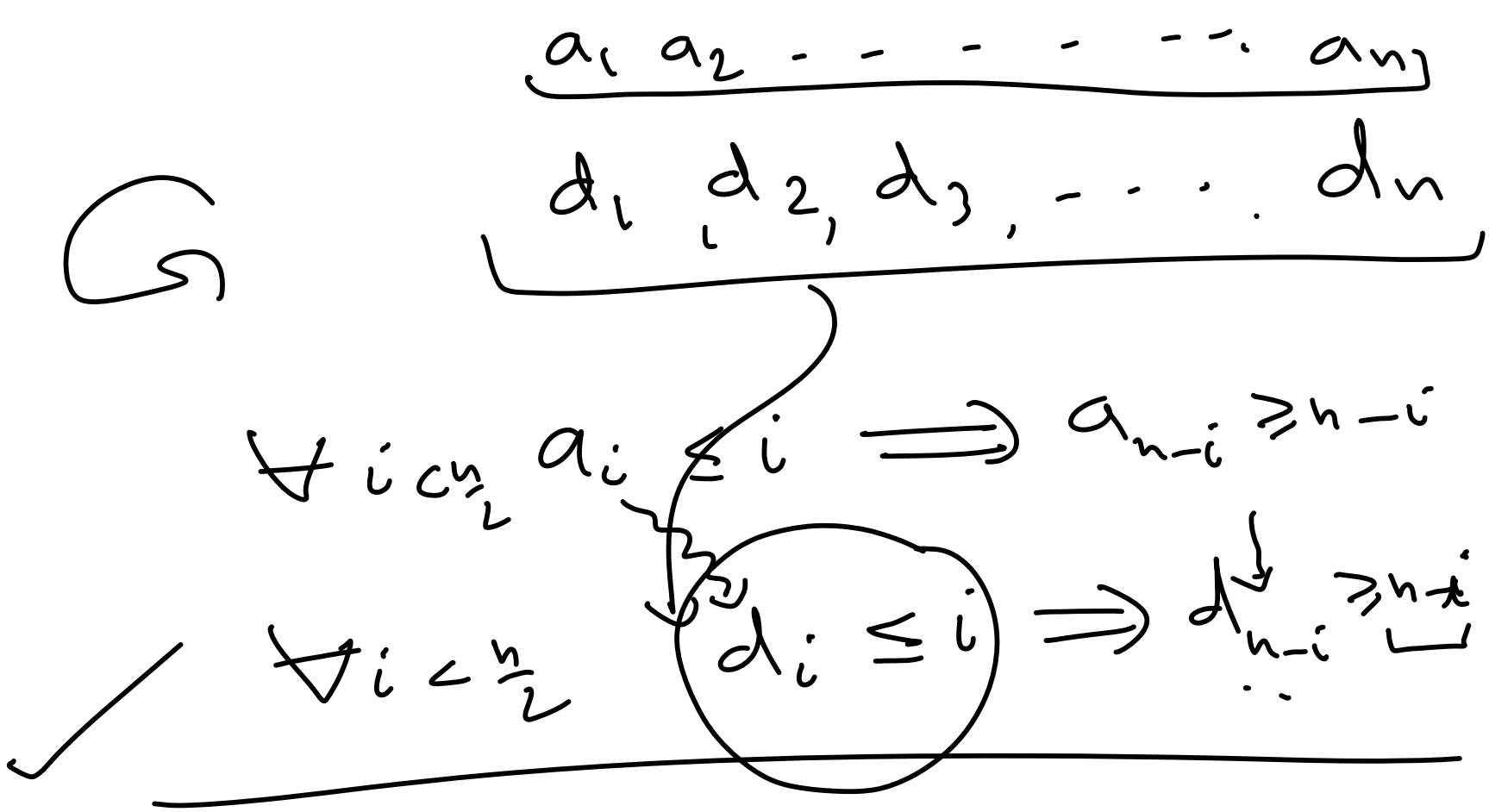
$a_i \leq d_i$

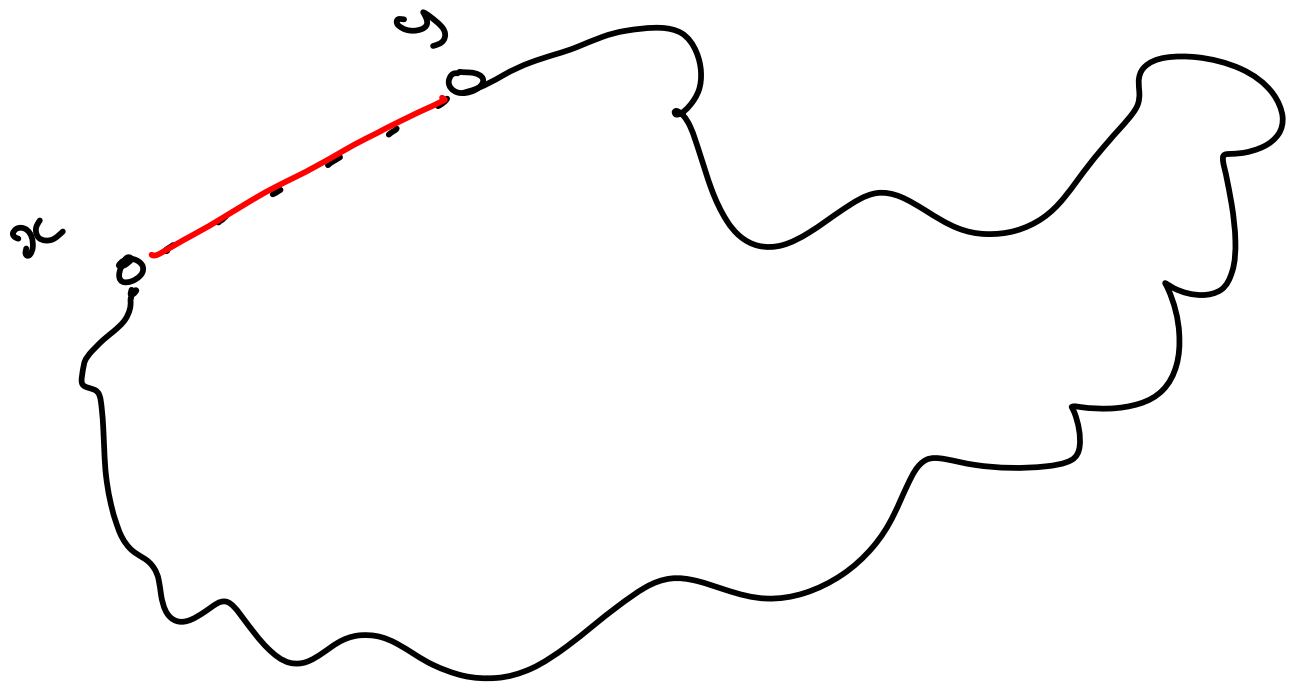


$a_3 \leq 3 \Rightarrow a_{n-3} \geq n-3$


$i < \frac{n}{2}$
$i+1$
a_i
a_{n-i}
$a_i \le i$
$a_{n-i} \ge n-i$
$d_i \le i$
$d_n, d_{n-1}, \ldots d_{n-i} \ge n-i$


$a_1, a_2, a_3 \ldots$
a_n
$\forall i < \frac{n}{2}$
$a_i \leq i \Rightarrow a_{n-i} \geq n-i$
$d_1, d_2, \ldots$
d_n

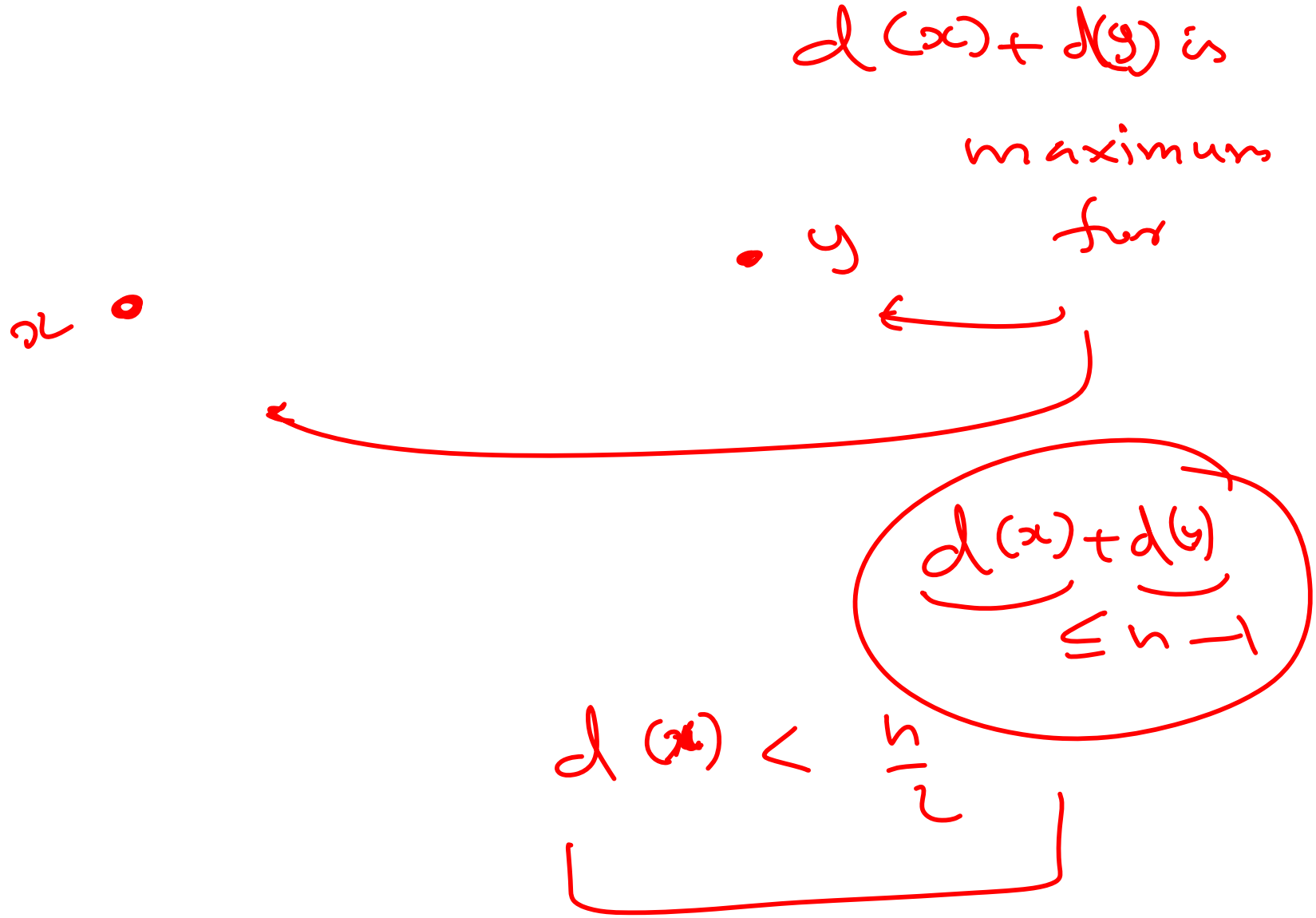

$a_1\ a_2 - - - - - - a_n$
$d_1, d_2, d_3, \ldots d_n$
$\forall i < \frac{n}{2}\ a_i \leq i \Rightarrow a_{n-i} \geq n-i$
$\forall i < \frac{n}{2}$
$d_i \leq i \Rightarrow d_{n-i} \geq n-i$


x
y

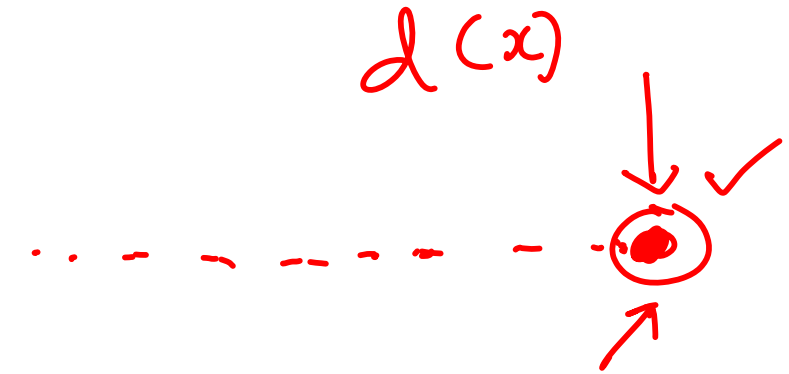

x
y
x

$n-1-d(x)$

$$d(x) + d(y) \leq n-1$$


d(x)+d(y) is
maximum
for
y
x
d(x)+d(y)
≤ n−1
d(x) < n/2

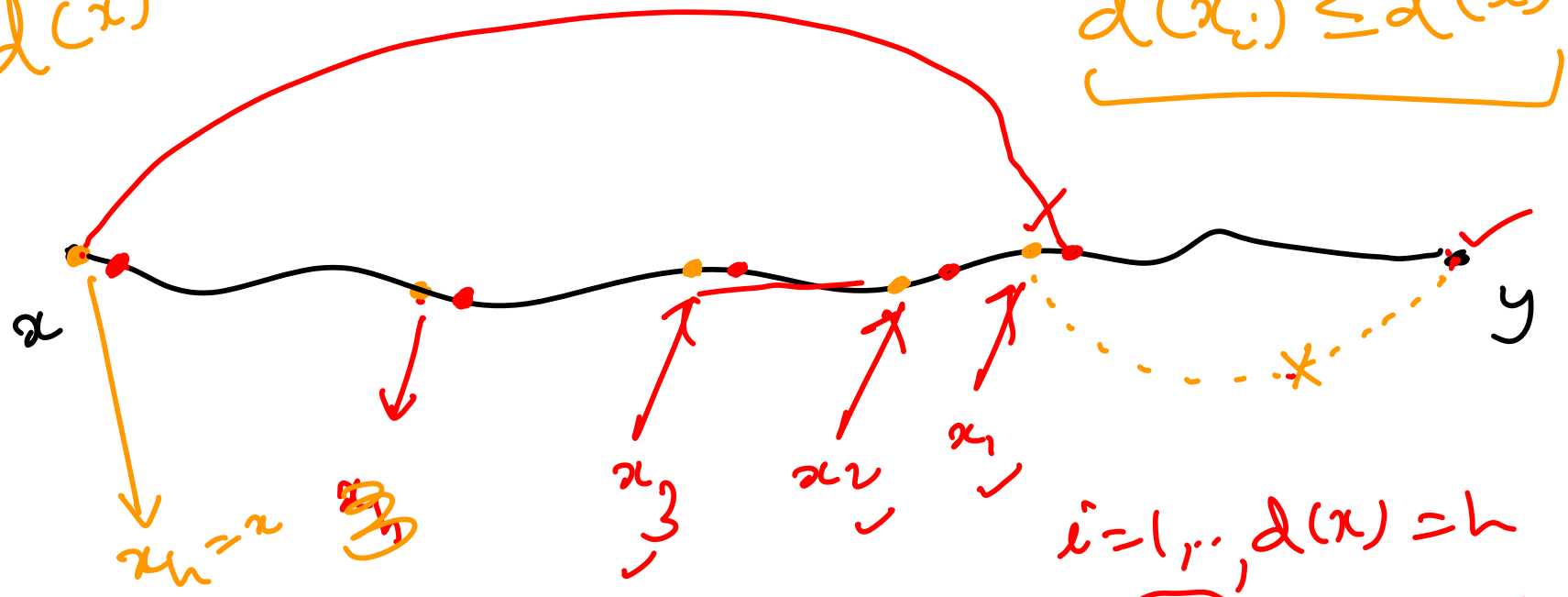
$h = d(x) <$



$\forall\, i = 1, \dots, h$

$d(x_i) \le d(x)$

$d(x)$



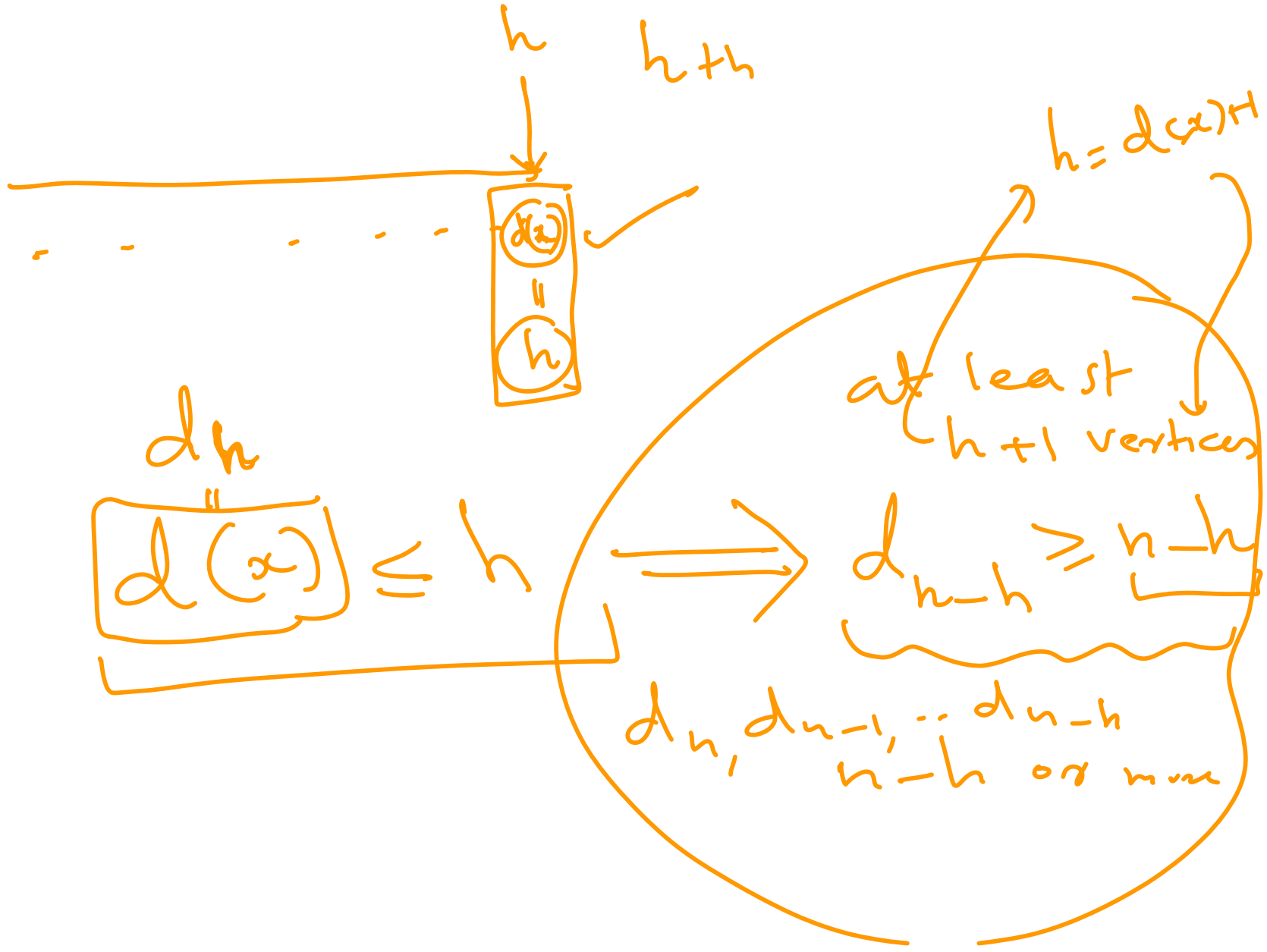
$h = d(x)$

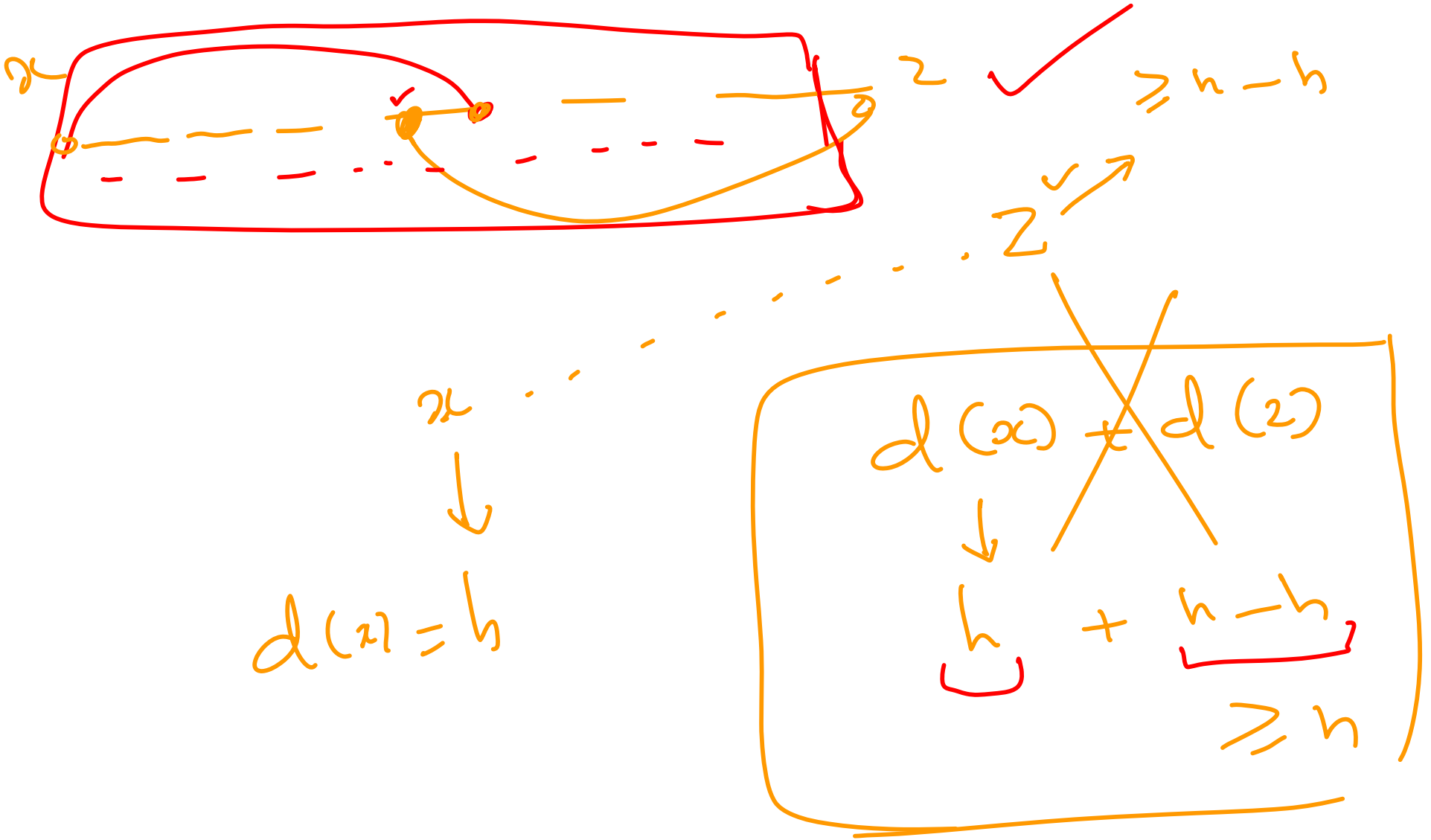
(x_i, y)

$i = 1, \dots, d(x) = h$

$d(x_i) + d(y)$

$d(x) + d(y)$


h
h th
h = d(x)th
d(x)
h
d h
d(x) ≤ h
at least
h+1 vertices
d h-h ≥ h-h
d h, d h-1, .. d h-h
h-h or more


x
z
≥ n − h
z
x
d(x) = h
d(x) ≠ d(z)
h + n − h
≥ h