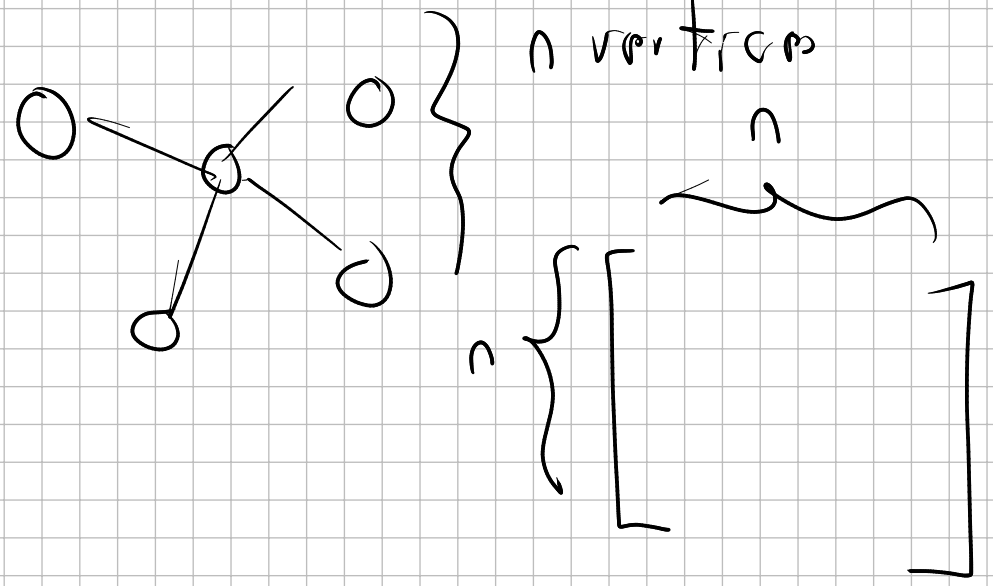
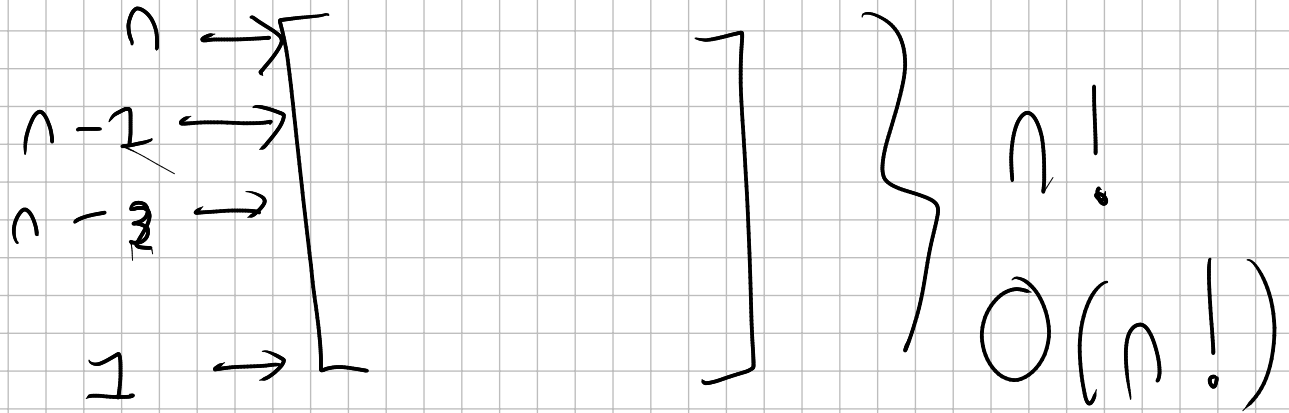
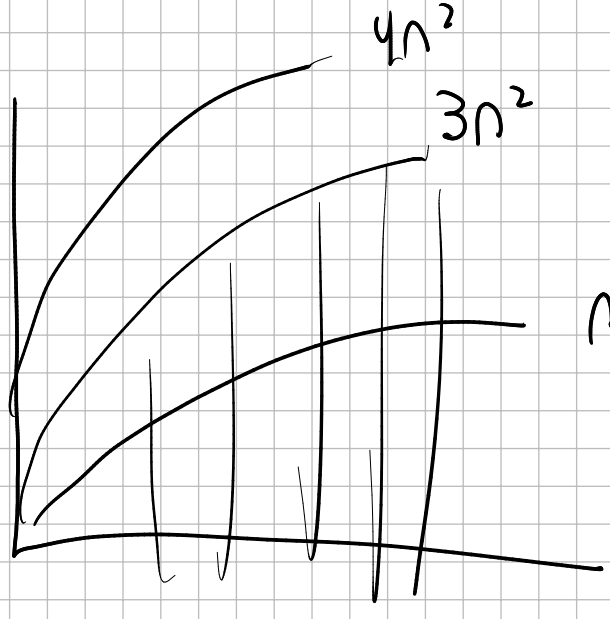
Isomorfismo







$O(n^2)$

$C \times n^2$

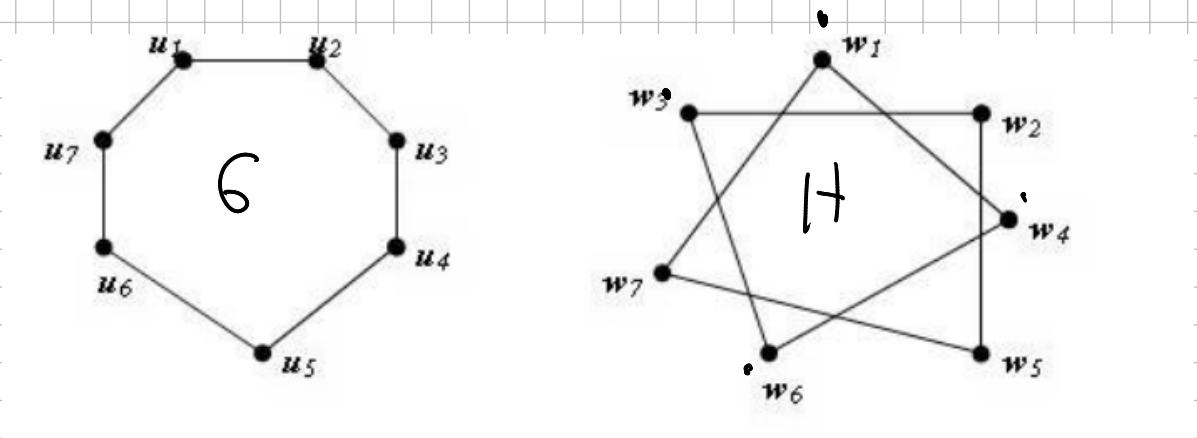
$C \geq 1$

$p(n) \leq C \times n^2$

G y H son isomorfos

G y H deben tener la misma distribución de grados

Existe una función que mape cada vertice de G en H



$G = \{2, 2, 2, 2, 2, 2, 2\}$

$H = \{2, 2, 2, 2, 2, 2, 2\}$

$G \xrightarrow{f} H$

$f(u_1) = w_1$ $f(u_4) = w_3$

$f(u_2) = w_4$ $f(u_5) = w_2$

$f(u_3) = w_6$ $f(u_6) = w_5$

$f(u_7) = w_7$

C_5

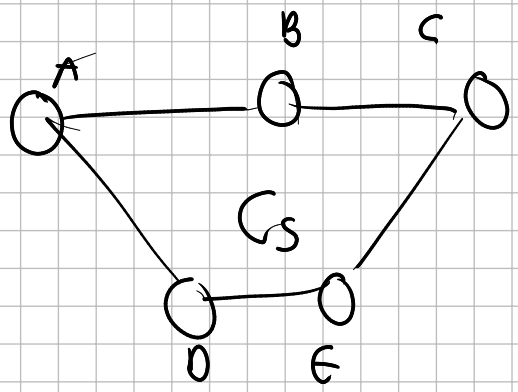
$\{2, 2, 2, 2, 2\}$

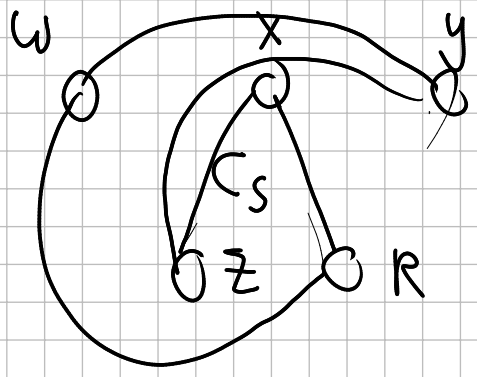
$\overline{C_5}$

$\{2, 2, 2, 2, 2\}$

K_5 $\{4, 4, 4, 4, 4\}$

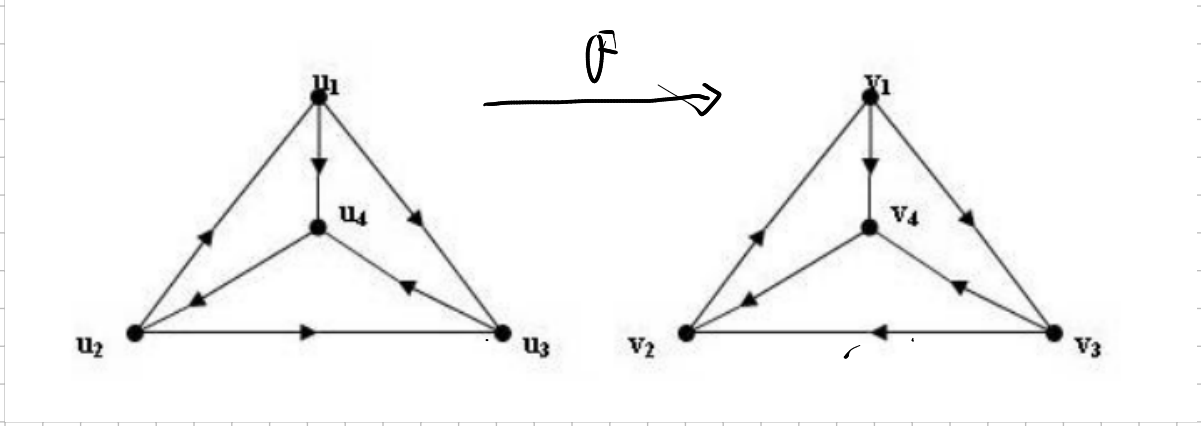
$\{2, 2, 2, 2, 2\}$





$f(A) = w$ $f(B) = y$ $f(C) = z$

$f(E) = x$ $f(D) = R$

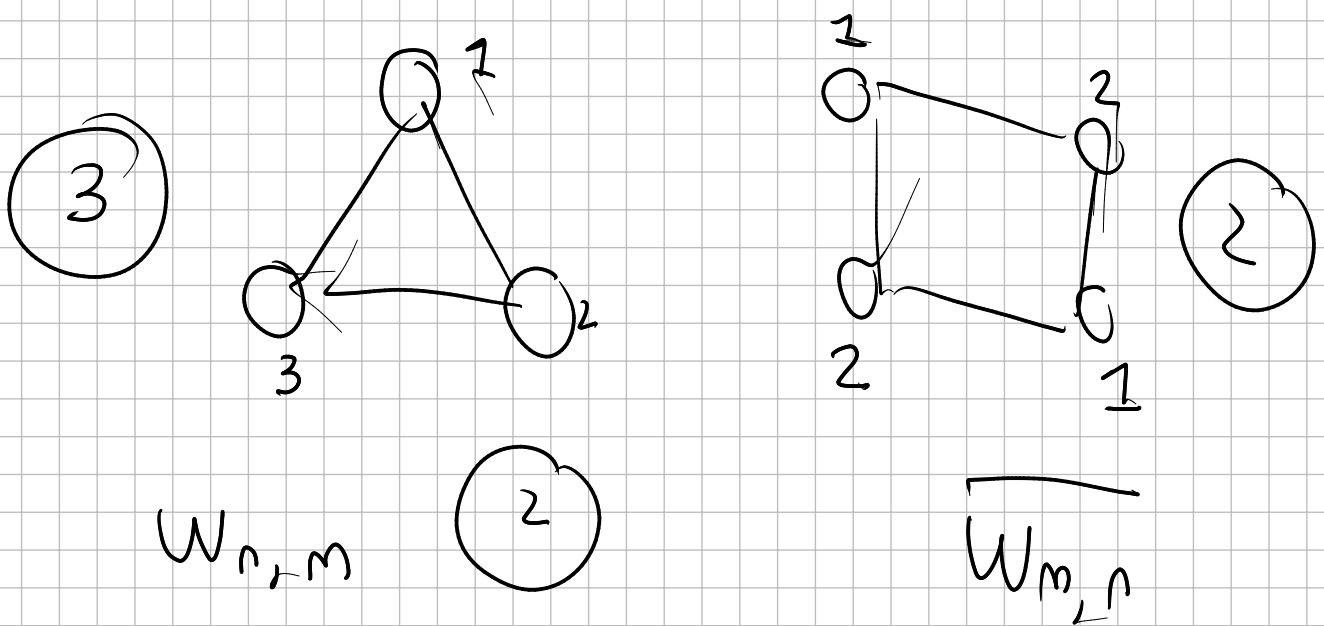


	δ^-	δ^+
u1	1	2
u2	1	2
u3	2	1
u4	2	1

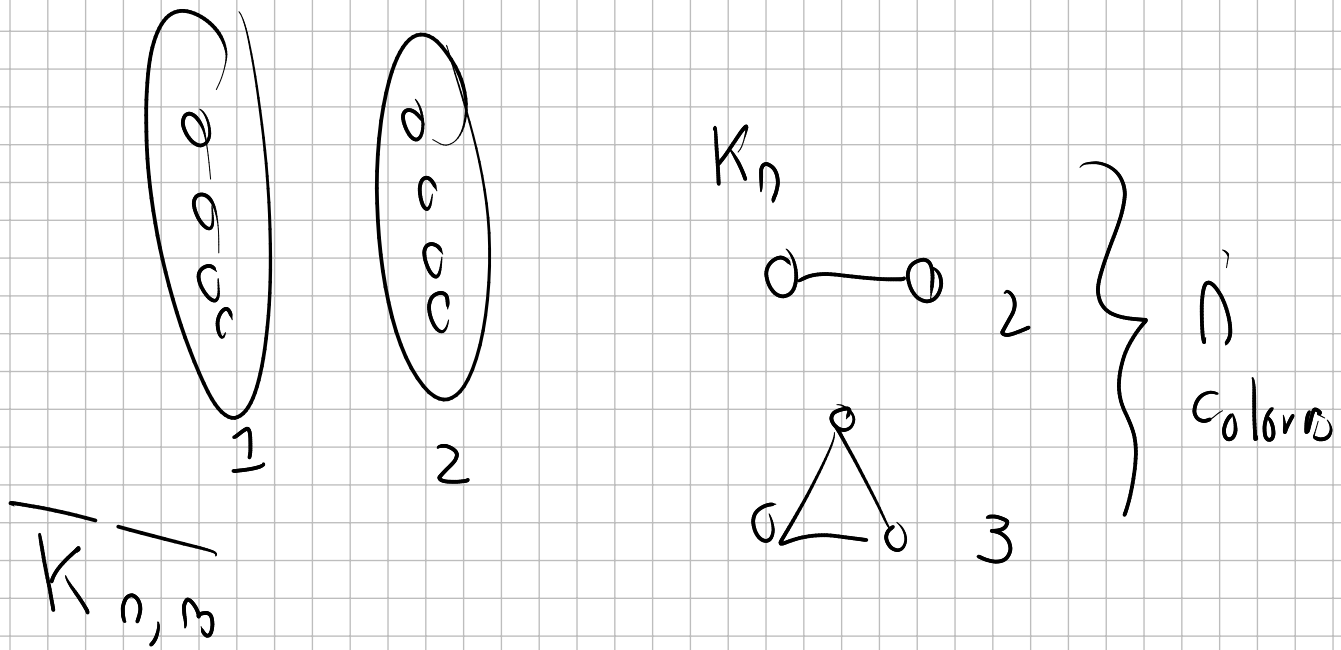
	δ^-	δ^+	
v1	1	2	$f(u_1) = v_3$
v2	2	1	$f(u_2) = v_1$
x v3	1	2	$f(u_4) = v_2$
v4	2	1	$f(u_3) = v_4$

Coloreo

NUMERO CROMATICO: MIN NUMERO DE COLORES QUE TIENE UN GRAFO



$W_{n,m}$ $\quad$ $\overline{W_{m,n}}$

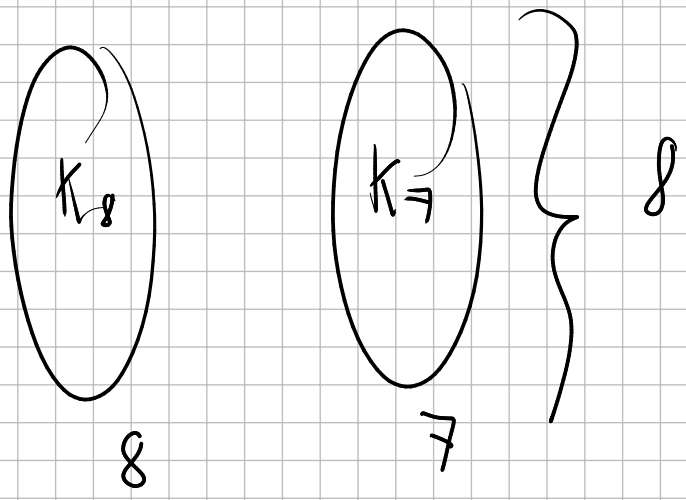


$\overline{K_{n,m}}$ $\quad$ $K_{8,7}$

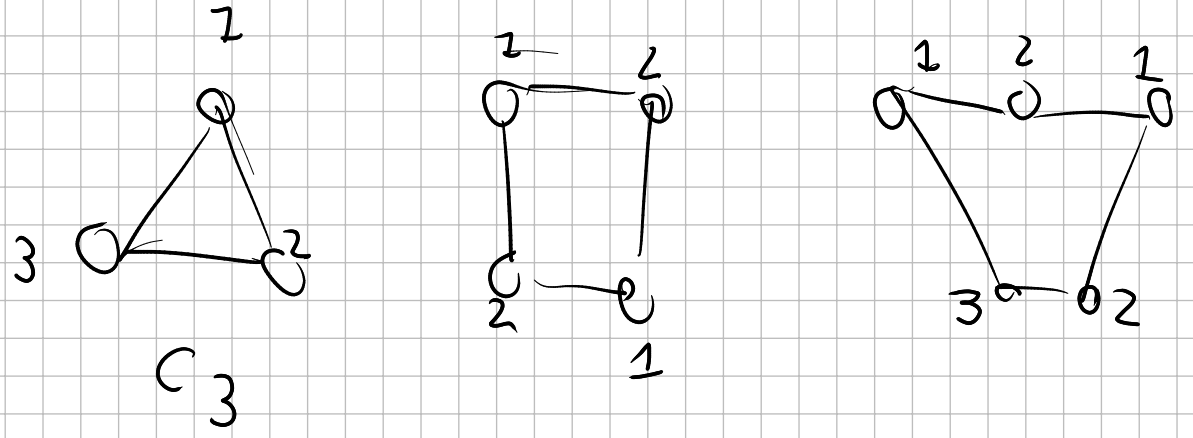
K_n $\quad$ K_m $\quad$ $\max(n,m)$

$K_{n,m}$ $K_{8,7}$

$\overline{K_{8,7}}$

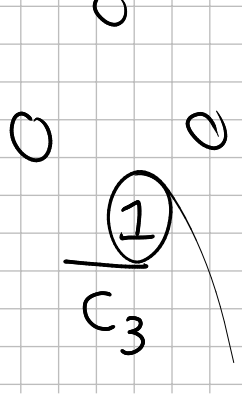


C_n

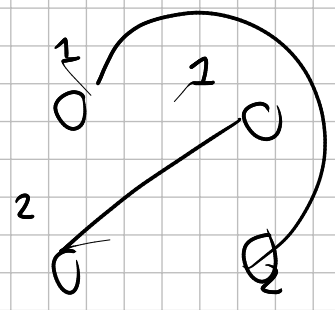


C_3

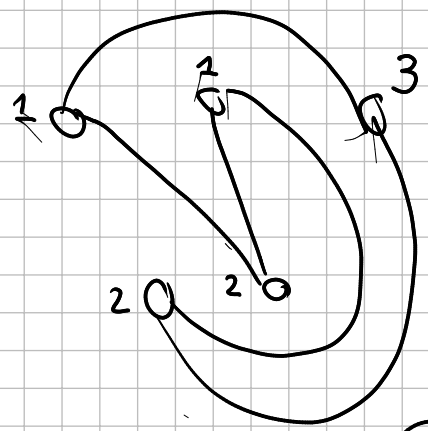
$\overline{C_n}$



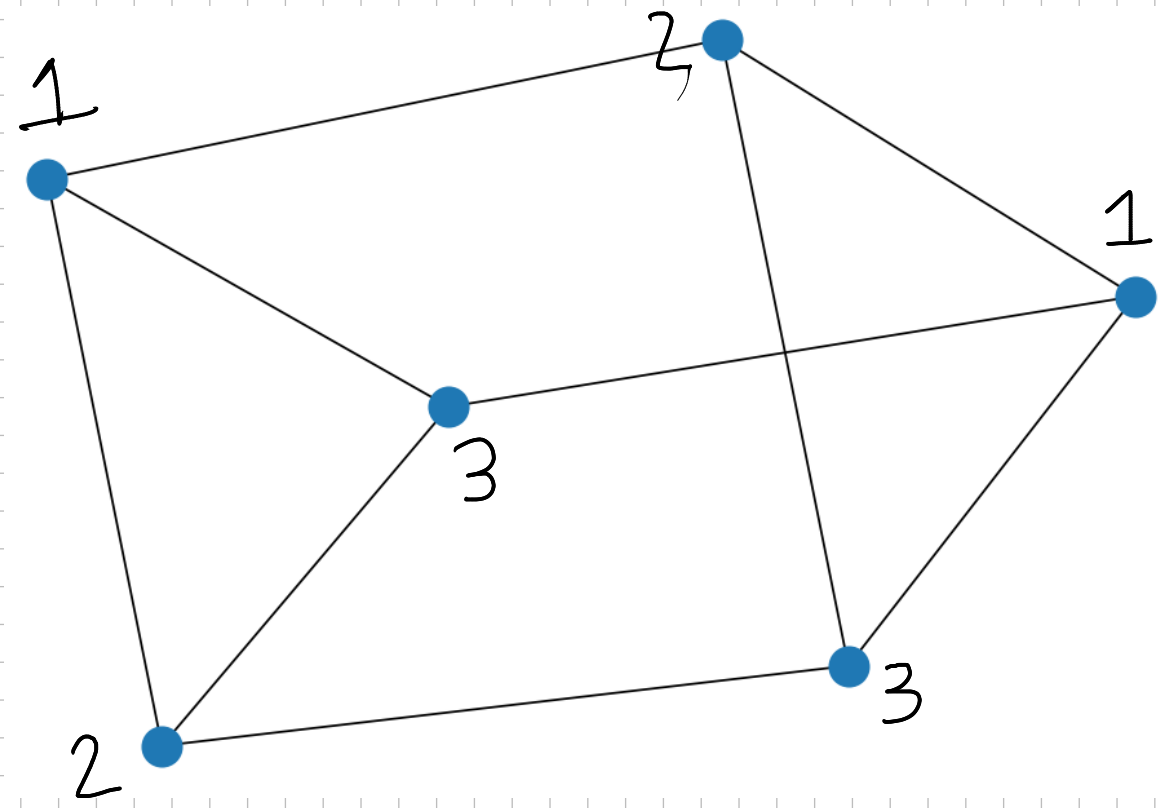
(1) $\overline{C_3}$



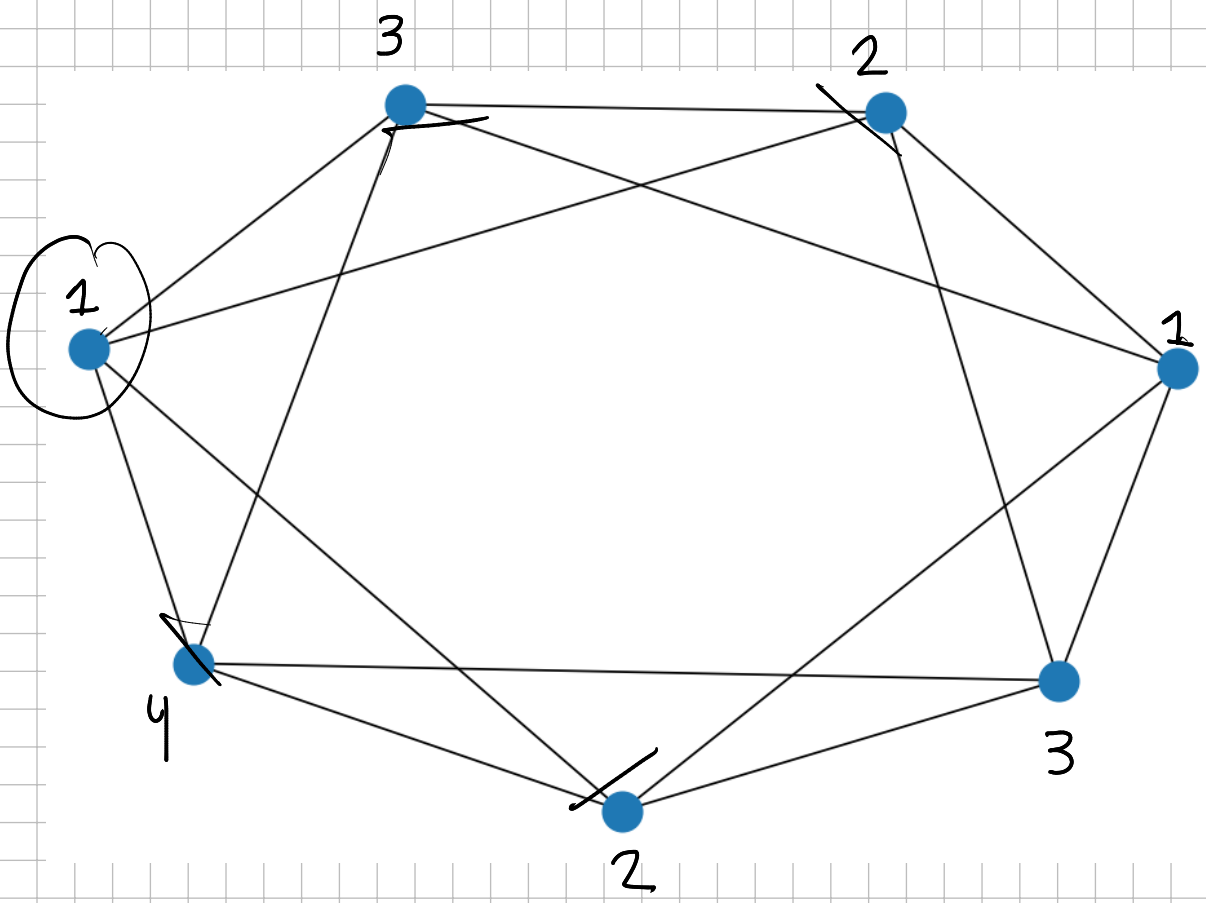
(2) $\overline{C_4}$

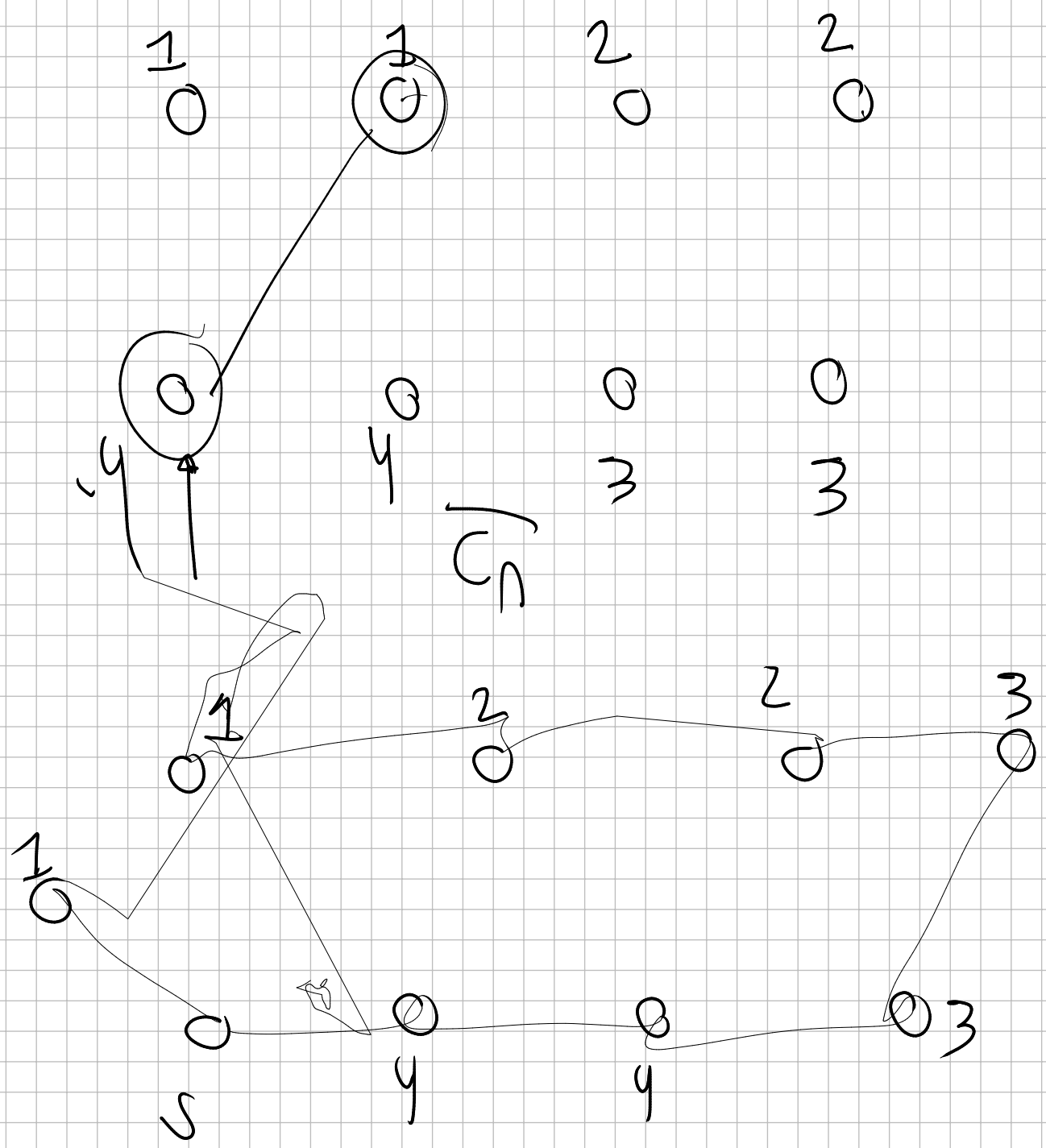


(3) $\overline{C_5}$



$\overline{C_6}$





$\overline{C_3} =$

$\overline{C_n}$	$\not\times C_r$	$\overline{C_n}$	$\not\times C_r$
$\left\lceil \frac{n}{2} \right\rceil$	1	6	3
3	2	7	4
4	3	8	4
5		9	5

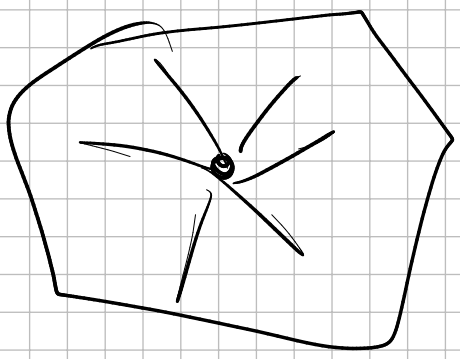
$n \geq 4$

$n = 3, 1$

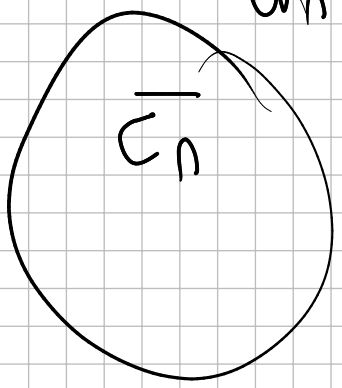
$$f(n) \in \begin{cases} 1 & n = 3 \\ \left\lceil \frac{n}{2} \right\rceil & n > 3 \end{cases} \qquad \overline{C_n}$$

0 en otro caso

ω_n



$\overline{\omega_n}$



0

$$f(n) \in \begin{cases} 1 & n = 3 \\ \left\lceil \frac{n}{2} \right\rceil & n > 3 \end{cases}$$