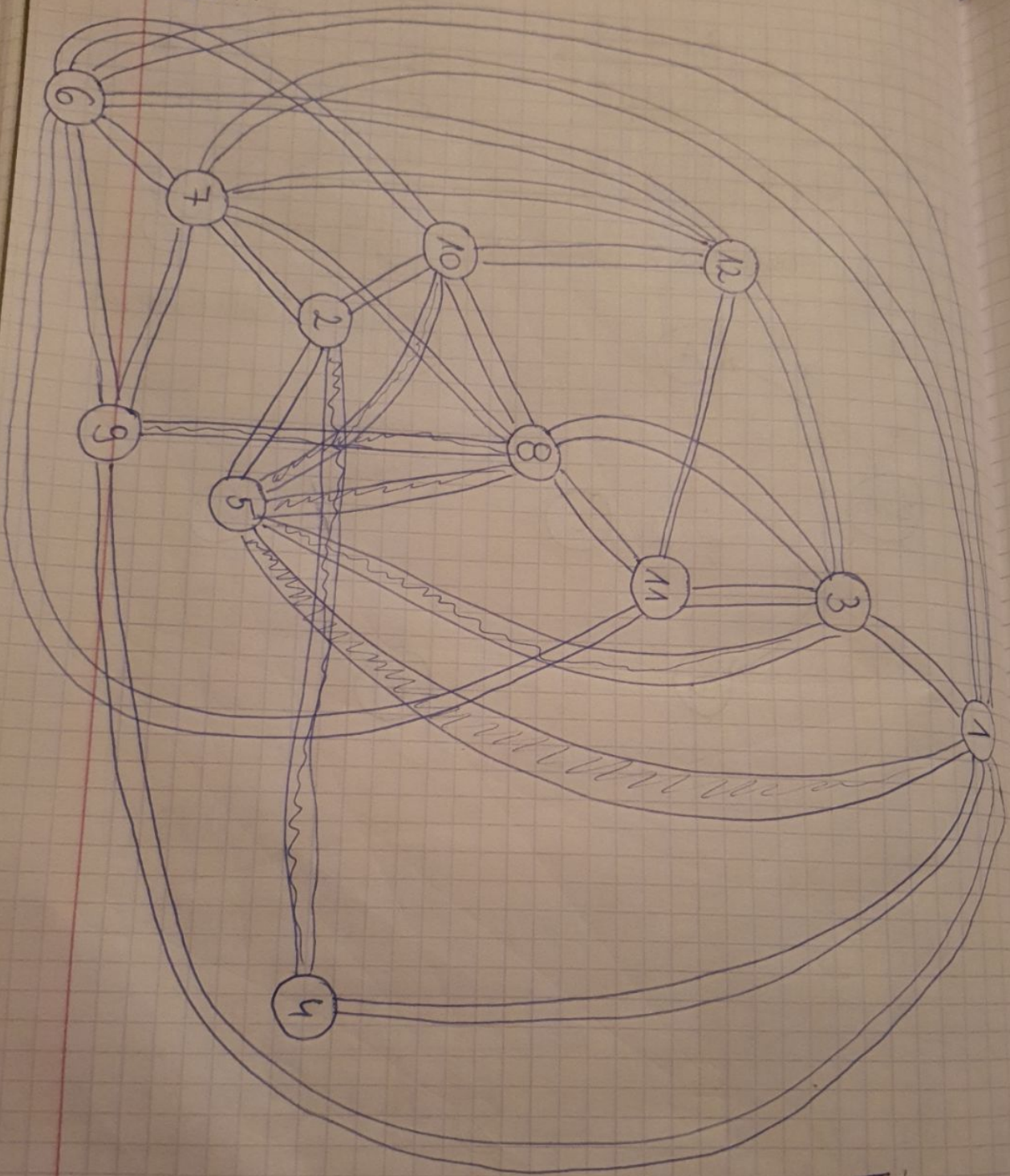


PROJEKT C2.1

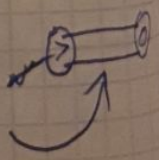
Filip Uhlis

zad 1.

zad 2.



jedne
konec 2

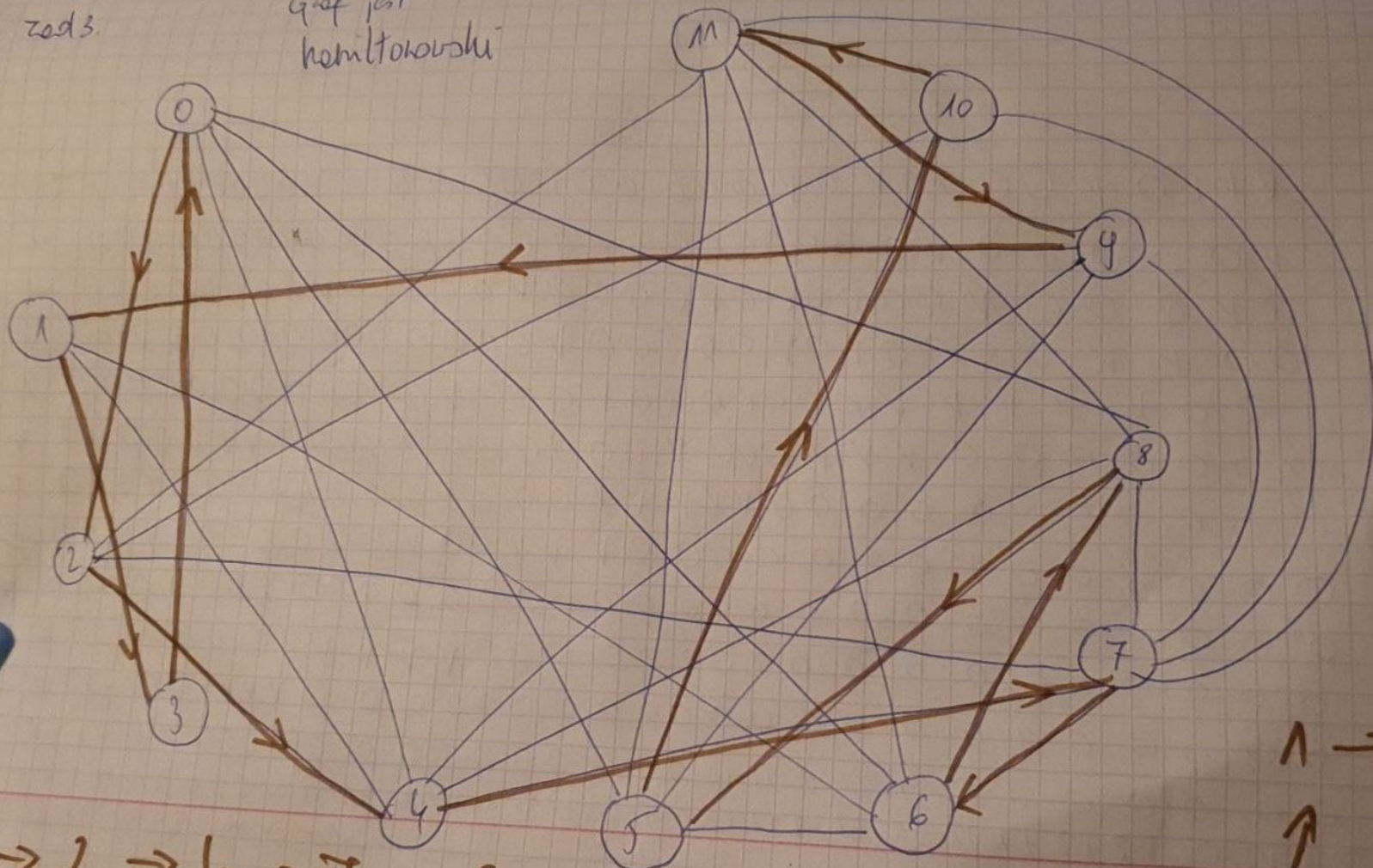


red 2

~~0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32~~

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	1	0	0	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0
9	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0
10	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1
12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	1

Graf jest
hamiltonowski

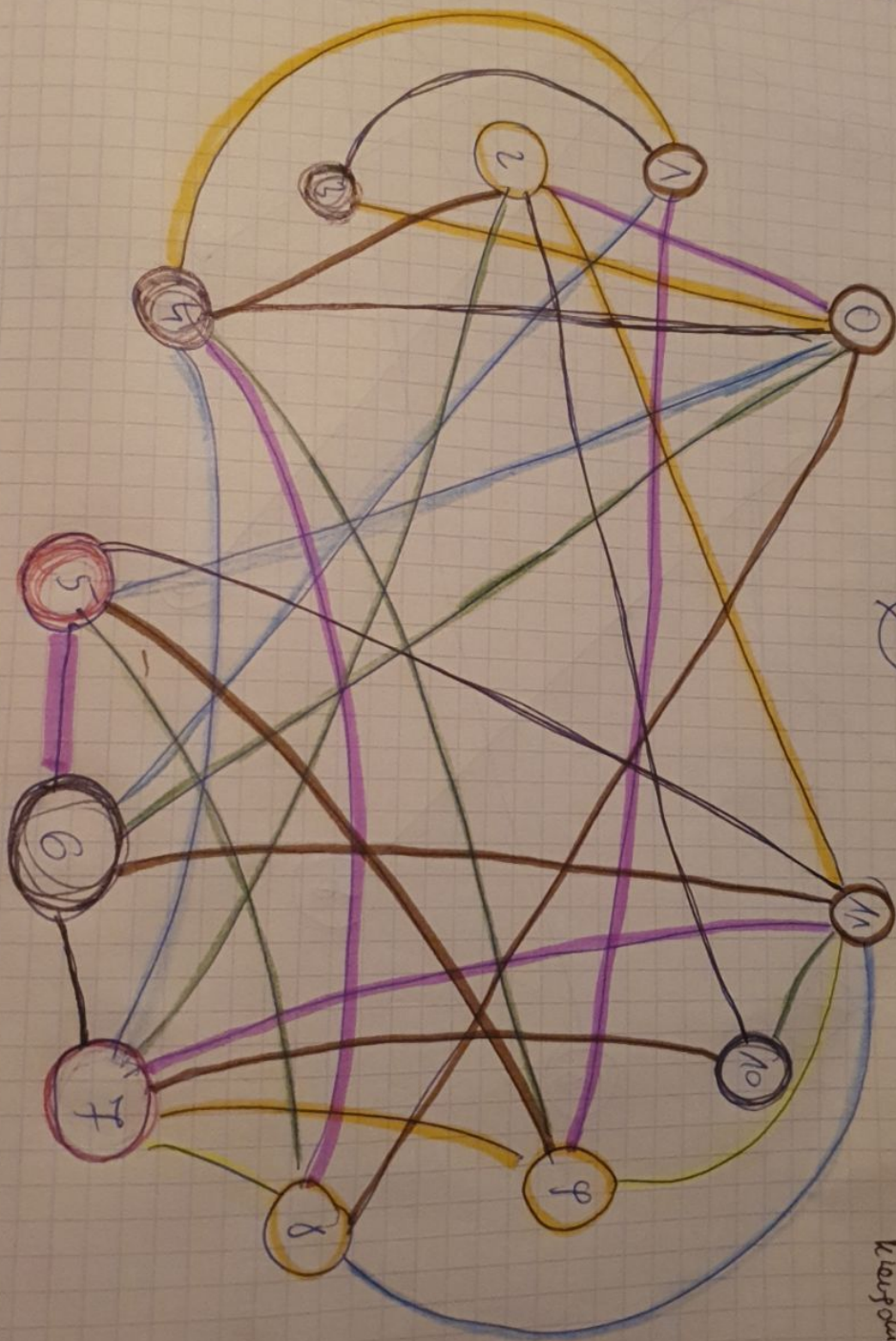


$0 \rightarrow 2 \rightarrow 4 \rightarrow 7 \rightarrow 6 \rightarrow 8 \rightarrow 5 \rightarrow 10 \rightarrow 11 \rightarrow 9$

1 → 3
↑ ↓
○

Zad 3.

Zad 4.
 Wroin grafie 8 wienothior ostopnir poryityn
 i 4 o st. nieperstyn \Leftrightarrow graf nie jest eulerooski
 zad 5 / zad 6



0 - wierzchołki
 — - krawędzie



Zad 6

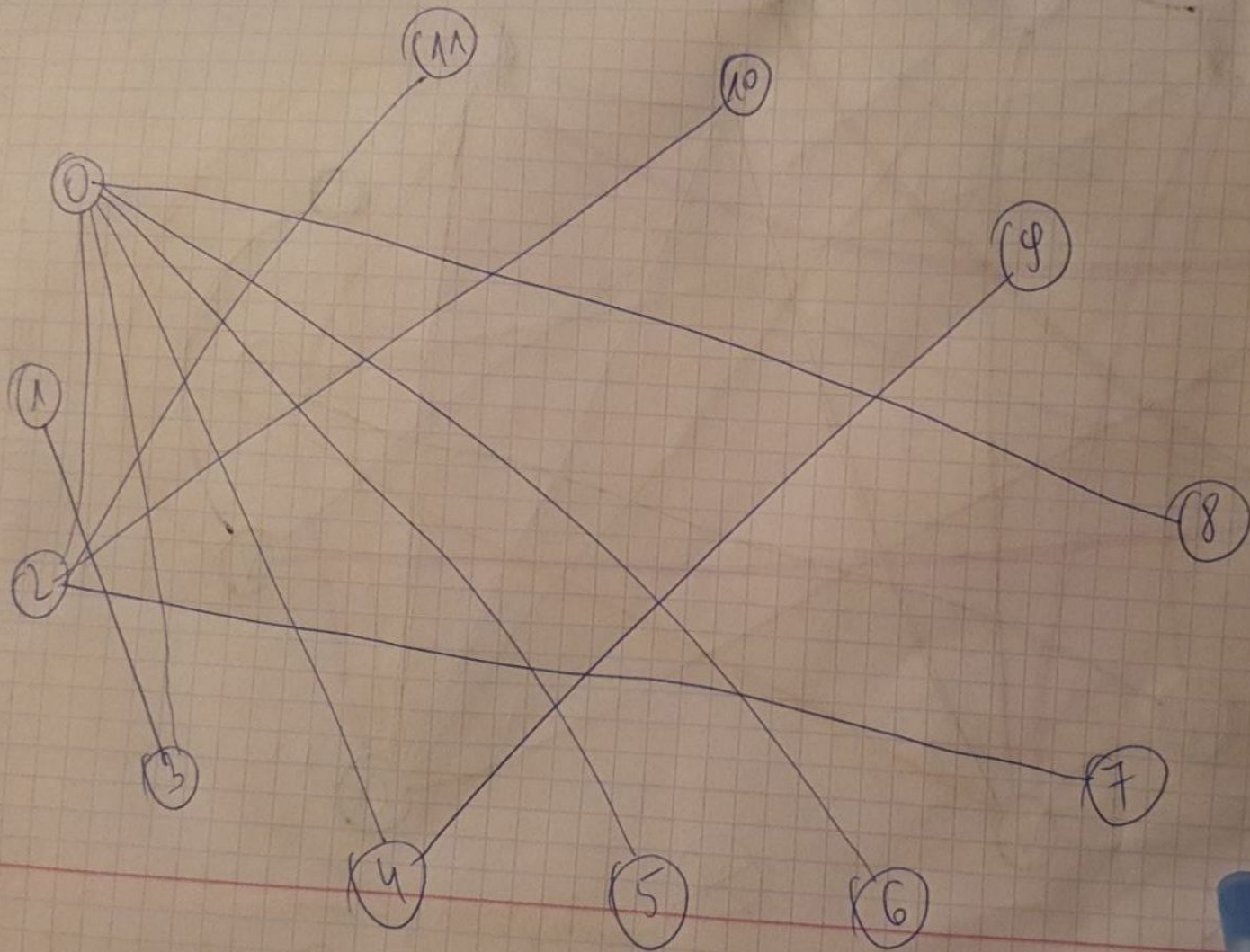
$$X(G) = 4$$

wienothior

$$X'(G) = 7$$

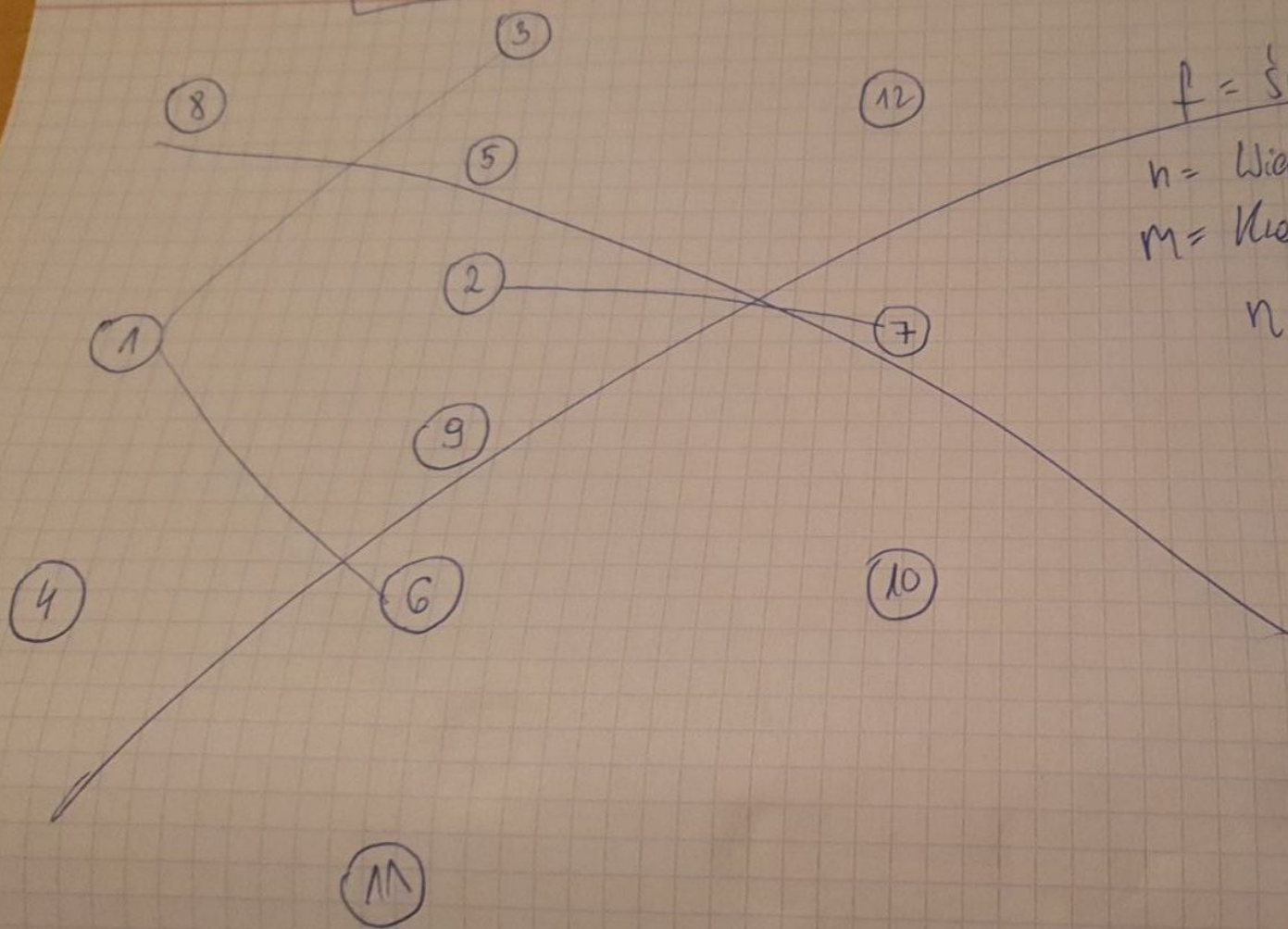
krawędzie

7 pot



zad 8.

Graf jest planarny - nie zawiera podgrafu z K_5 i $K_{3,3}$.



$f = \text{ściany}$

$n = \text{Wierzchołki} = 12$

$m = \text{Krawędzie} = 32$

$$n - m + f = 2$$

$$f = 2 + m - n$$

$$f = 2 + 32 - 12$$

$$f = 22$$