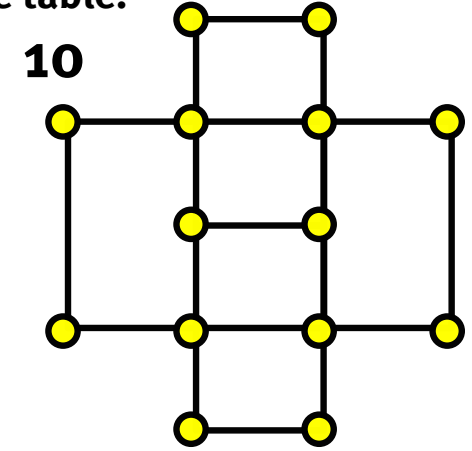
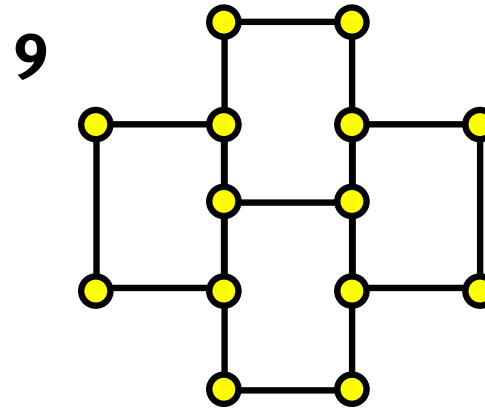
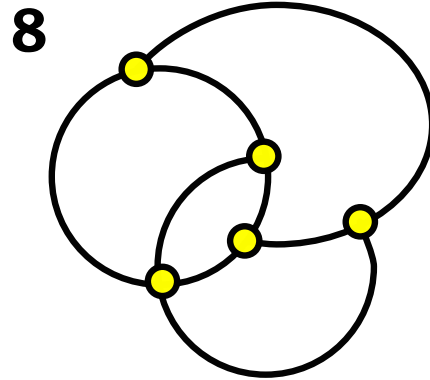
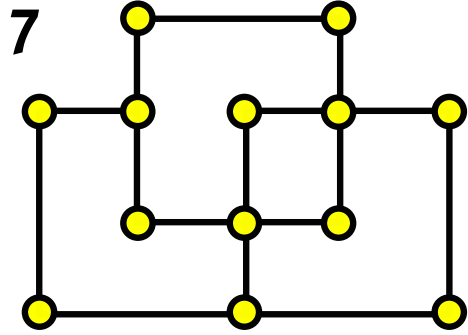


# Euler's formula: $V - E + F$

To use the formula, count the number of vertices, edges and faces (regions, including the outside of the graph) for each graph on this sheet, and on the previous sheet, and fill in the table.



Shape	City of Königsberg	1	2	3	4	5	6	7	8	9	10
No. of vertices	4	4	5	5	6	6	7	13	5	14	14
No. of edges	7	5	8	7	10	9	12	16	8	17	19
No. of faces	5	3	5	4	6	5	7	5	5	5	7
$V - E + F =$	2	2	2	2	2	2	2	2	2	2	2