NDMI107 • 2024 • Homework 2 • Due 22 March

1. Let F denote the graph with four vertices that consists of a triangle and a fourth edge. (To put it differently, let F denote the graph with four vertices whose degrees are $3, 2, 2, 1$.) For all n greater than 3, express $\mathrm{ex}(F, n)$ by a formula and justify your answer.

2. As customary, let C_n denote the cycle with n vertices. For all n greater than 2, express $\mathrm{ex}(C_n, n)$ by a formula and justify your answer.

Mail your solutions to `vchvatal9@gmail.com` *by 23:59 of Friday 22 March.*