

$$r = \max \left\{ \left\lceil \frac{\deg(f)}{2} \right\rceil \right\} \cup \left\{ \left\lceil \frac{\deg(g_i)}{2} \right\rceil \right\}_{i=1}^k \cup \left\{ \left\lceil \frac{\deg(h_j)}{2} \right\rceil \right\}_{j=1}^l$$

