1. For which graphs is $r_v(G) = 2$ for all $v \in V(G)$?

2. Can we characterize which vertices in a graph have $r_v(G) = 2$.

3. (a) For which graphs is $Z(G) = M(G)$?

   (b) For which graphs is $Z^+(G) = M^+(G)$?

4. How far apart can M and Z be? Can we find a construction that increases Z but not M or where Z grows faster than M? What about M^+ and Z^+?

5. Can we characterize the vertices in a graph whose deletion increases Z?

6. Is there a nice proof that $Z^+(G) \geq \delta$ where δ is the minimum degree of the vertices in the graph?

7. If H is a subgraph of G then we don't always have that $Z(H) \leq Z(G)$ or $Z^+(H) \leq Z^+(G)$. Can we characterize subgraphs, H, such that $Z(H) \leq Z(G)$ or $Z^+(H) \leq Z^+(G)$? What about $H = K_n$ or $H = C_n$?

8. If G is a strongly regular graph, can we say anything good about $Z(G)$?

9. If G is a circulant/Cayley graph can we say anything good about $Z(G)$?