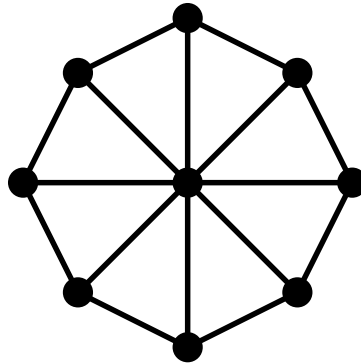


Spring 2023, Math 579: Preliminary Problem Set 13
Due: Thursday, April 27th, 2023
Planar Graphs

Preliminary problems. These problems should be completed before discussion on Thursday.

- (P1) Given below is a planar graph. Find a different embedding in which the degree-8 vertex borders the “outside” face.



- (P2) Find the dual G^* of the graph G depicted above (with the original embedding).

- (P3) Find an isomorphism between G and G^* (in this case, we say G is *self-dual*).