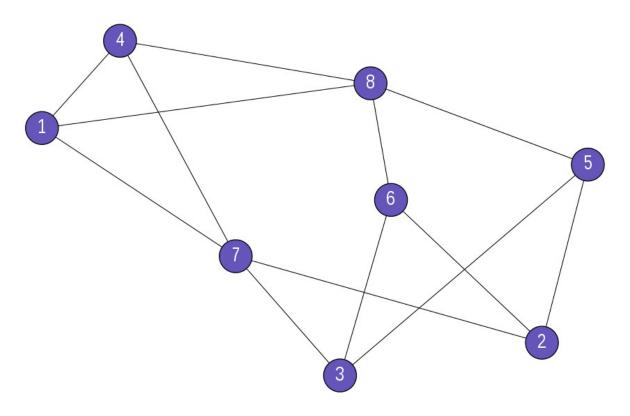
OEIS A338584, Illustrations of a(13)=1 and a(14)=6.

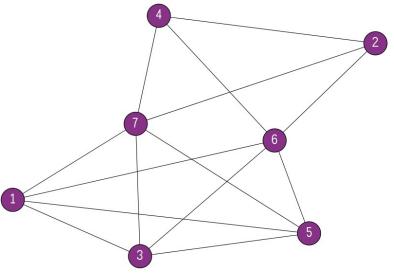
Number of unlabeled nonplanar connected graphs with n edges with minimum degree 3 at each node that are not 3-connected.

$$a(13) = 1 (13 edges)$$
:

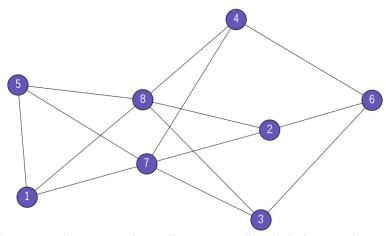


Nonplanar graph on 8 vertices, disconnected by deleting vertices 7 and 8.

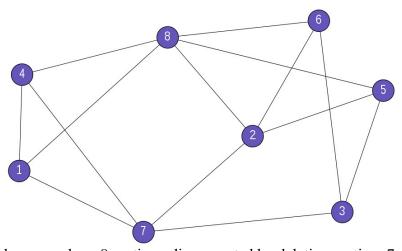
a(14) = 6 (14 edges):



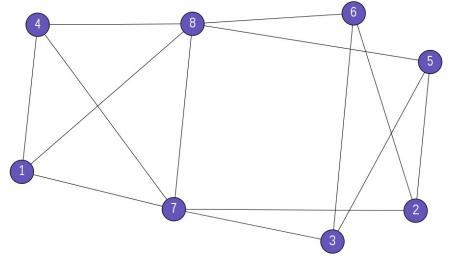
Nonplanar graph on 7 vertices, disconnected by deleting vertices 6 and 7



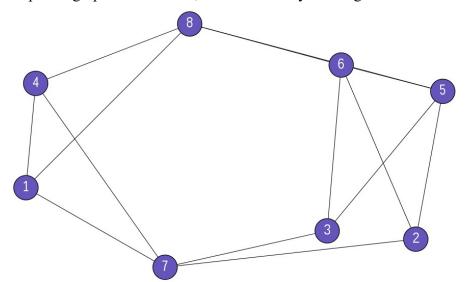
Nonplanar graph on 8 vertices, disconnected by deleting vertices 7 and 8



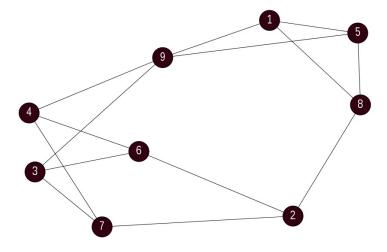
Nonplanar graph on 8 vertices, disconnected by deleting vertices 7 and 8



Nonplanar graph on 8 vertices, disconnected by deleting vertices 7 and 8



Nonplanar graph on 8 vertices, disconnected by deleting vertices 7 and 8



Nonplanar graph on 9 vertices, disconnected by deleting vertices 2 and 9