In-class Activity 10: Connectivity Augmentation

1. Determine the minimum number of edges that can be added to each of the following graphs so that the result is 2-connected. (a) The star $K_{1,100}$. (b) The double star formed formed two copies of $K_{1,3}$ by adding an edge joining the centers.

2. For the same two graphs, determine the minimum number of edges that can be added so that every 3 vertices are in a cycle.