${\rm HW}~5$

- **1.** C
- **2.** n-1
- 3.
- 1. Connected component: All vertices
- 2. In-component: $\{3,4,5,6,15,16,20,19,18,13,12,7,8\}$
- 3. Out-component: $\{2, 4, 5, 6, 8, 7, 9\}$