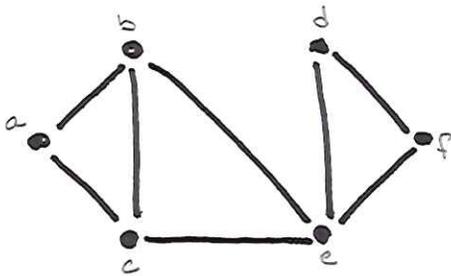


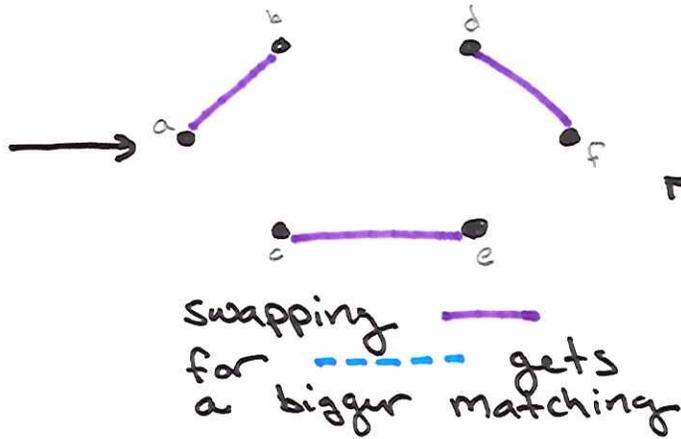
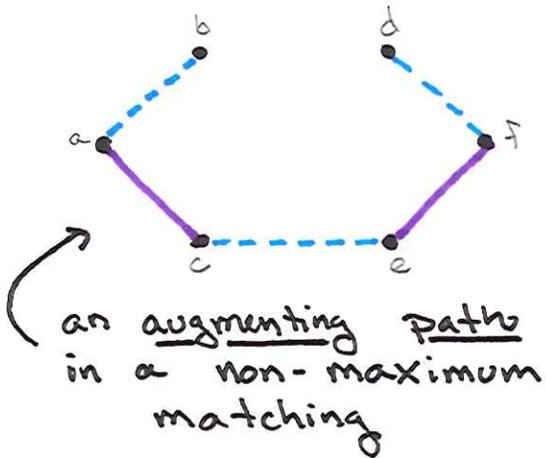
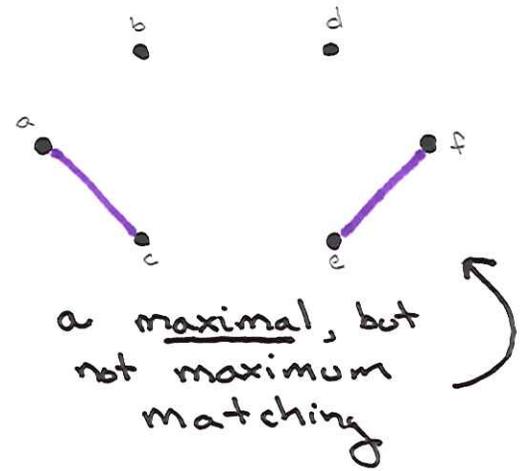
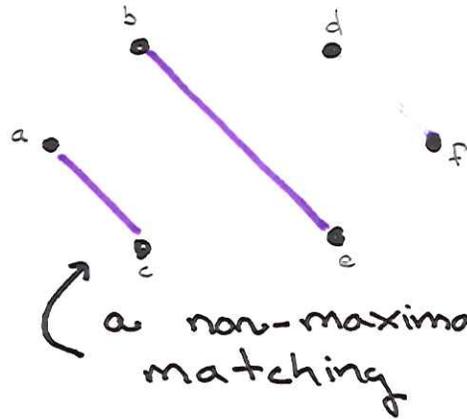
From last time:

Matching: set of edges in a graph with no loops and no two edges incident to the same vertex.

Examples:



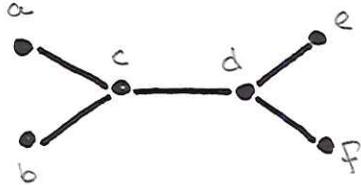
↑
G



a maximum matching.
Also a perfect matching.

* Not all graphs have perfect matchings,
(even if $n(G)$ is even and $e(G) \geq \frac{1}{2}n(G)$)

ex:



A matching saturates a set of vertices if every vertex in that set is incident to some edge in M .

ex: Any matching of G above saturates at most four vertices.

Any maximum matching saturates $\{c, d\}$.